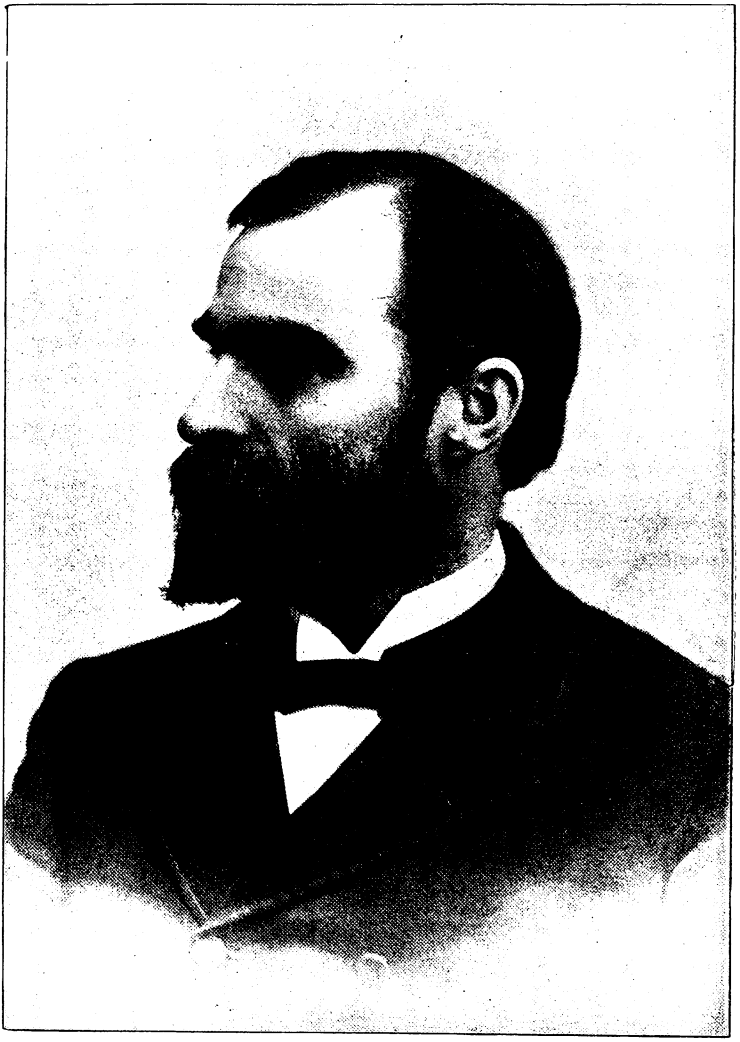


THEODORE MENGES, B. S., A. M., D. D. S.

Snap-Shots at the National Association.

The National Association held its annual meeting at Old Point Comfort, the picturesque spot where the supposed amalgamation of the old American and Southern Associations occurred three years ago. The idea of having subdivisions of the Association, to be known as Eastern, Western, and Southern branches, it is well known now, was placed in the constitution as a means of inducing the Southern men to agree to union. From any other viewpoint the plan is bad, and as neither an Eastern nor a Western branch has ever been organized, it is to be hoped that in the not distant future the Southern men will themselves offer an amendment to the constitution abrogating the branches, in which event we will have a truly representative National Association.

By comparison with the Niagara meeting several instructive deductions may be reached. First as to attendance; apparently the meeting this year was smaller than that of last, yet this was only so from a single point of view. The small meeting room last year, with the insufficient seating accommodations which compelled many to stand crowded about the doors, gave an erroneous impression of numbers, while the spacious hall which more than seated the members this year made the meeting seem smaller by comparison. From the treasurer's books, however, it was discovered that actually six more members paid their dues this year than last. The Niagara meeting attracted daily many of Buffalo's two hundred dentists who merely put in an appearance without taking active part in the proceedings, returning to their homes at night. While present, however, they served to swell the apparent numbers. Thus at the final analysis the meeting this year was quite as well attended as was the Niagara meeting.

The next point of comparison is the general quality and quantity of the papers. At Niagara we had many more papers than could be read, with the inevitable result that though several at least were of prime importance, the discussions were brief and on the whole unsatisfactory. This year the reverse conditions maintained. There were very few papers, several announced on the printed programme failing to respond to their names, while the average of those read was scarcely above mediocrity. Nevertheless, as for the most part they dealt with practical subjects in a practical way, and there was abundance of time, the resultant discussions were quite interesting and instructive. The time for these discussions unquestionably was obtained under the very successful working of the new experiment, the Executive Council. It was pleasant indeed to have the usual red tape wound and unwound in secret session, and it is to be hoped that this feature of the Association's management will be maintained.

The President's Address.

The President's address, delivered by Dr. Holly Smith, was prepared and delivered in his usual rhetorical and oratorical manner. The subject matter and especially the innovations recommended made a good impression, meeting with hearty indorsement from the members, as well from the committee to which the address was later referred.

He gave an admirable discourse on dental education, relating many conditions as he had found them to exist in the various colleges to which he had made visits. He prophesied that the future of dental education will depend not alone upon a demand for a higher preliminary general education of students but as well upon a preparatory education which shall include manual training, and he recommended preliminary or preparatory courses in conjunction with the schools. The idea was also suggested that hereafter the demand will grow for a higher fitness of those who essay to teach. The lecturers in dental schools should be proficient in the art of imparting knowledge which today is counted as a distinct branch of work, rather than an avocation to be adopted by anyone who may have the opportunity of obtaining the appointment to a professorship.

As a means of better systematizing the work of the Association and of achieving something permanent in the line of research the President recommended the organization of commissions, the members of which should devote themselves during the year to a specified subject, collecting data upon which to formulate a report, which report should recommend the adoption of a particular mode of procedure, which if

PROF. JONATHAN TAFT,

Dean, Michigan University Dental College.

indorsed by vote of the Association should thereafter be known as the National Association method until such time as through progress some more advanced methods shall have been brought to light. In this connection a committee was later appointed which recommended the adoption of the President's idea, the Commission for the first year to include the chairman, secretary and three members from each section. At least one section, Section one, acted upon this idea of the President, choosing a subject of investigation and selecting its working committee. If each section does likewise, and the work is properly prosecuted, the Association will have the promise of at least five instructive papers for next year.

The President also recommended that statistics be gathered from practitioners in America and Europe relative to dental fees. He believes that a report on this matter obtained from such sources might well form a foundation for lectures in our colleges with the end in view that respectable fees, as nearly as possible uniform, might be established throughout the country. Of course, no definite charges could be fixed that would meet all conditions of practice, yet minimum fees might be set which would give even the beginner a promise of a fair living, while to charge less might be considered as an act demeaning to one's professional standing. For example, it might become an established precedent that all practitioners should regulate their charges by the hour, at a minimum fee of five dollars for an hour's work.

The President reported that in connection with the pending bill in Congress which aims to establish an army corps of dentists, Surgeon-General Sternberg had intimated that should the bill become a law he would be pleased to have recommendations for appointments reach him through the National Association. This idea was well received and it was finally decided that such applications should be considered by the Executive Council, who would make recommendations to the Surgeon-General's office.

During the discussion of the President's address Dr. McManus made some pertinent remarks based upon interesting statistics. He pointed out that the present membership in the National Association is much too small, and he indicated sources from which the Association should have a right to look for recruits, from which however little support is now obtained. He roughly estimated that the colleges of the country have at least four hundred and fifty men in their faculties, while the examining boards have an aggregate of three hundred more. Here are over seven hundred men, avowedly interested in dental progress, every one of whom should be affiliated with the national body, yet he doubted whether more than ten per cent. of them are on the roll.

PROF. B. HOLLY SMITH,

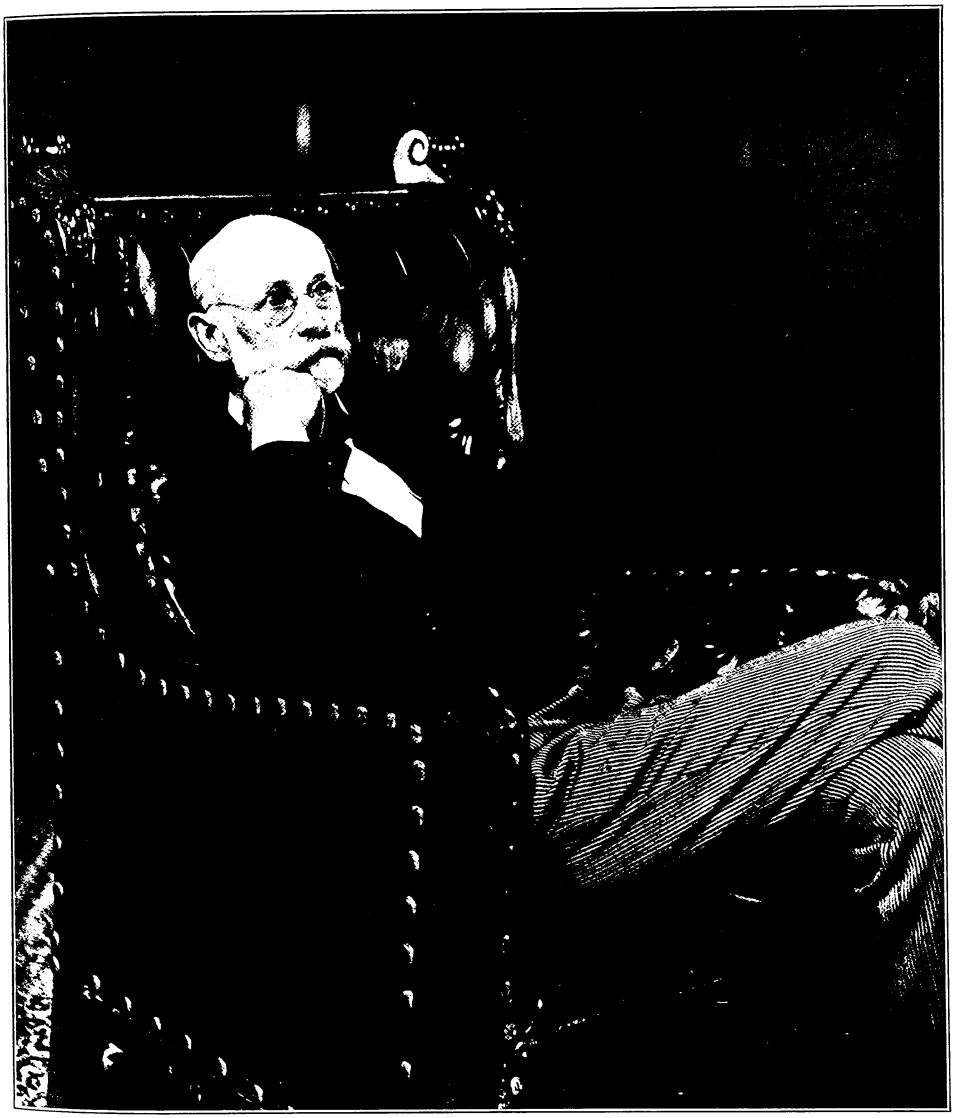
President National Dental Association, 1899-1900.

The fact thus plainly stated by Dr. McManus has long been whispered in the dark corners of dark corridors at Association meetings, and it would be most gratifying if Dr. McManus through his courage in making this public statement might stir some of these men to join the Association. It would not be a bad idea if the faculties of the various schools were to apply for membership in a body. The schools now announce in their catalogues that they belong to the National Association of Dental Faculties. Would it not be a further indication of their reputability if they would also say "Affiliated with the National Dental Association?"

"Inlays," Dr. C. N. Johnson.

Dr. C. N. Johnson read a paper entitled "Inlays; their Advantages and Limitations." This was a brief practical paper, being a conservative plea for the gold inlay. The essayist argued that from the general standpoint of utility the properly made gold filling is unsurpassed. He thought, however, that the great display of gold is reprehensible and that with advancing culture in this country it is becoming intolerable among our better classes, a sentiment long existing in Europe. Used with due discrimination, therefore, he admits a place for the porcelain inlay, the ideal location, in his mind, being the labial gingival surface. In the back of the mouth he conceives many teeth badly broken down where it becomes a problem whether a filling or a crown would best serve. Too often he thinks the crown is adopted because of the lengthy operation which would be entailed to insert a gold filling, the strain on the patient being an important consideration. In these positions he thinks a good compromise might be effected by relying upon the gold inlay. He declared that this can be made not only to fully restore contour, but that by beveling margins and overlapping with the inlay, weak walls may be supported.

In the course of the discussion much was said *pro* and *con*, regarding the gold inlay, Dr. Ames being particularly enthusiastic in his advocacy. He pointed out that much better edges can be made with gold as an inlay than with porcelain, owing to its ductility and the perfection to be attained by finishing the inlay after setting it, the contrary being true with porcelain where the stone or sandpaper strip often does more harm than good. Others with equal strenuousness deprecated too great reliance on gold as an inlay, pointing out that it might be undertaken by too many as an apparently easy means of performing a difficult gold operation. It was urged that in the past one of the highest tests of the American dentist's skill has been the insertion of difficult gold contours, which have proven of permanent value, and the hope



PROF. G. V. BLACK,

President National Dental Association, 1900-1901.

was expressed that this standard may long continue as a measure of dental achievement. Whilst giving due consideration to his patient's personal appearance and conserving the beauty of the face and mouth as far as possible our aim still should be to do permanent rather than temporary work.

"New Cavity Preparation," Dr. E. K. Wedelstaedt

Dr. E. K. Wedelstaedt, of St. Paul, read a paper entitled "A New Cavity Preparation for Distal Cavities in Cuspids." The essayist explained his method by two diagrams. In Fig. 1 "a" is seen the distal cavity as heretofore prepared and filled. He declares that by this method many failures have occurred, the inaccessibility of the cavity leading to incomplete filling with recurrence of decay, or else fracture of the incisive corner and loss of the filling. For a time therefore he cut away the corner, extending the cavity to "b," which rendered the cavity more accessible. He found that the retaining point made at the incisive corner in this style of cavity was inadequate to withstand the strain (or perhaps he said "stress") of mastication. He therefore has further extended his cavity to "c," producing the step which offers great resistance to forces which tend to dislodge. The appearance of such a filling is shown in Fig. 2.

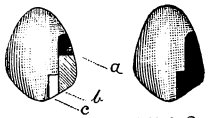
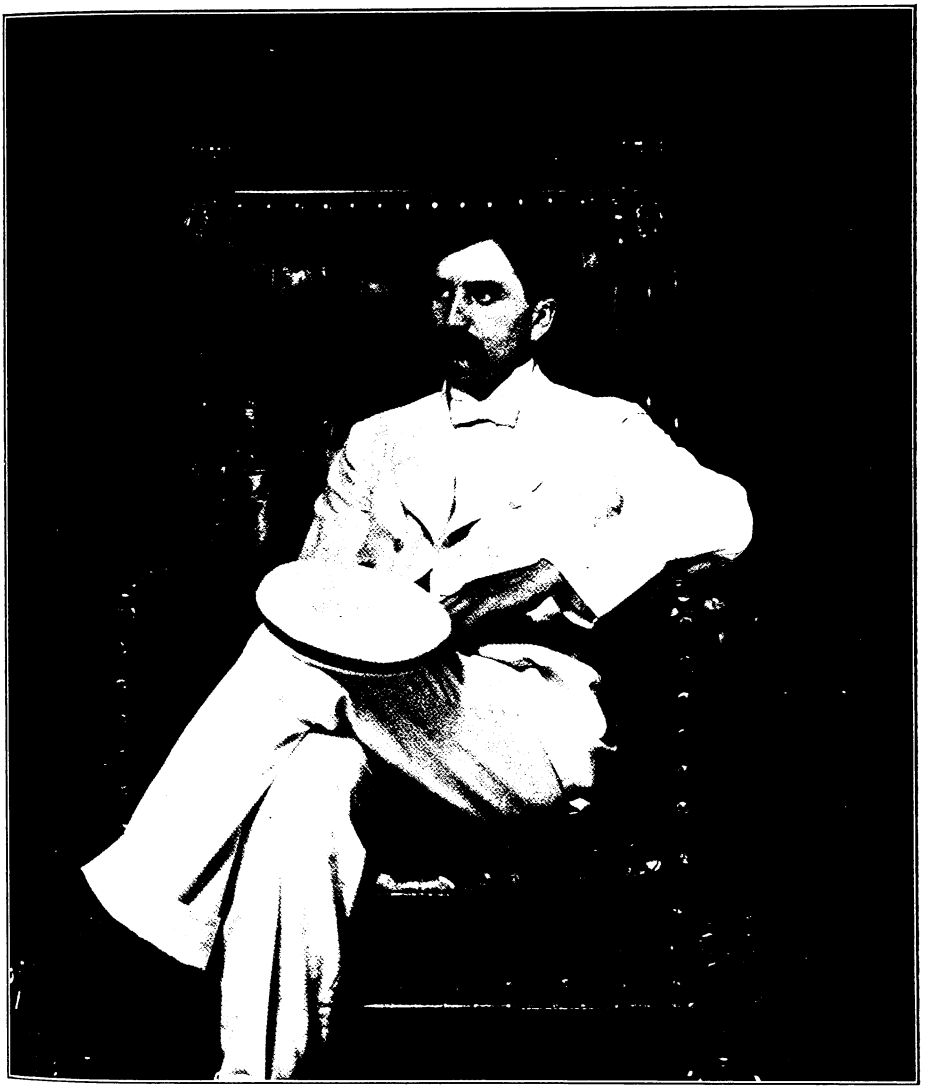


Fig 1. *Fig 2.*

This cavity shape, involving such extensive cutting away of tooth substance and such a display of gold was not received with much favor, though some admitted the author's claim that the filling would not be conspicuous in the distal approximal surface, being hidden by the labial enamel ridge. This contention does not seem sufficiently well founded if we recall that distal cavities in first and even second bicuspids often become quite conspicuous when restored with gold. The cuspid cavity reaching us no larger than is shown at "a" in Fig. 1 would scarcely seem to warrant the display of gold indicated in Fig. 2. If inaccessible in its original shape, why not cut away, at the palatal aspect, until ready access be obtained? Even in a case of severe strain from mastication, if this step formation were deemed advisable, it would still seem that it could be made entirely from the palatal side, preserving the labial enamel,



DR. H. J. BURKHART,

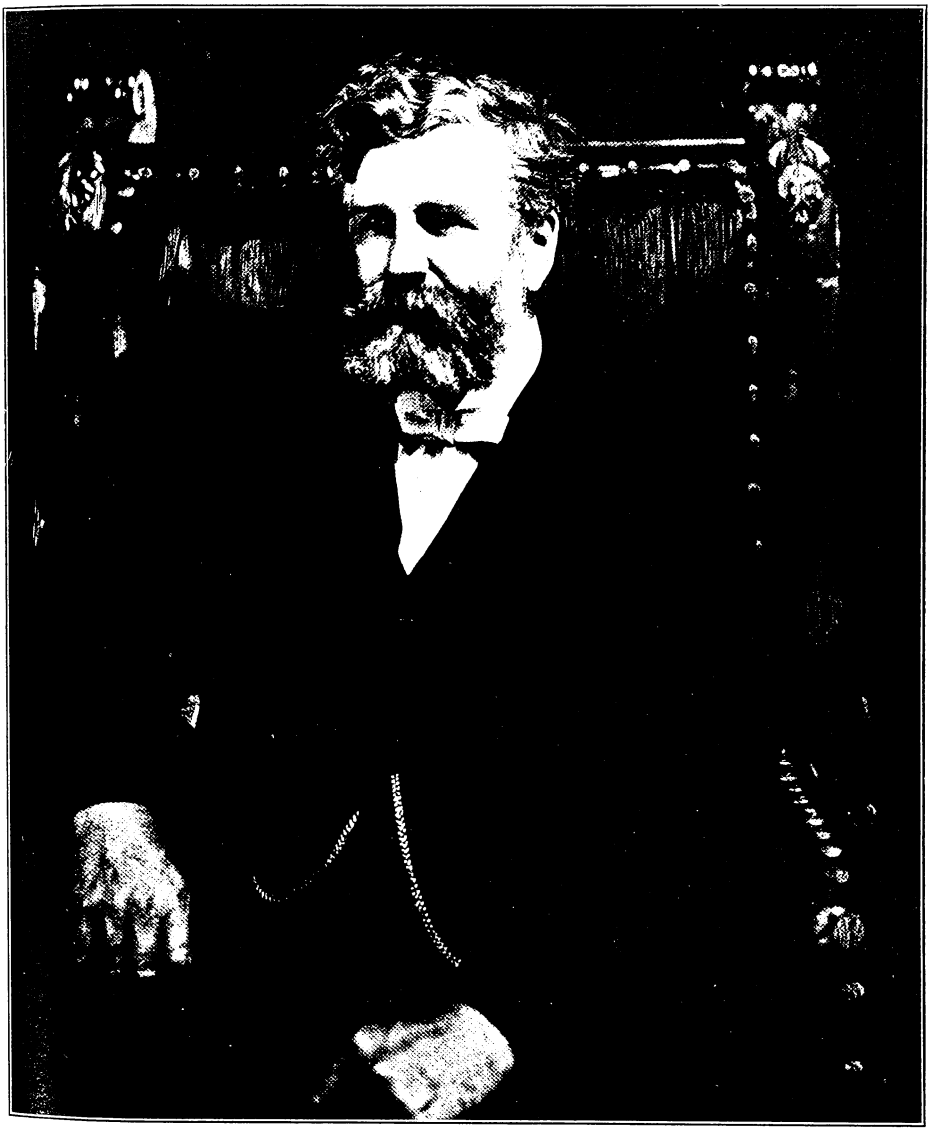
President National Dental Association, 1898-1899.

and supporting it by building the gold along the incisive edge with little if any display. In such cases gold and platinum is the prime reliance, a combination which was generally advocated by those who entered into the discussion.

Dr. Weeks made a plea for unification of principles of cavity preparation. The idea is of course a good one, as are all that tend towards the erection of single standards of dental practice. But it is useless to preach unification of methods to graduates. The principles should first be adopted by the teachers, and then taught uniformly in all schools to undergraduates. This would bring us a new generation of dentists, following definite lines in their work, and by no other means can the end be looked for, while even thus the individuality of every man fitted to rise above mediocrity will tincture his practice so that he depart from his teaching. By such means is progress achieved.

"Evolution of Teeth," Dr. A. H. Thompson.

The printed programme announced a paper from Dr. A. H. Thompson entitled "The Evolution of the Bunodont from the Haplodont Forms of Teeth." Dr. Thompson was not present, and the paper was read to the Association by Dr. Barrett. The result was instructive and is worth analysis and thought. First the bare facts may be stated. During the reading by actual count sixty-eight men left the room, while sixty remained, of which latter number more than half were so near the front that they could not have left without making themselves conspicuous. As it was, the exodus was so noticeable that Dr. Barrett stopped reading long enough to say that as the paper was a very scientific one, and as the National Association was supposed to work towards scientific advancement it was a painful surprise to him to find so many unwilling to lend their attention. Evidently he considered that those who left the room, in a measure, disgraced themselves. Let us consider this impartially and impersonally. First, then, as to the reading of the paper. In the absence of the author it could not have been placed in the hands of one more suitable than Dr. Barrett, because the subject is one with which he is familiar and of which he is fond. Nevertheless, it is very rare that a paper will attract as much attention in the absence of the author as when he adds his personality to his words. Next as to the paper itself and the subject. It is true, as Dr. Barrett claimed, that the paper was a scientific presentation of a scientific subject. In this respect it was excellent. Nevertheless it was exactly the kind of paper that never should have been presented to the full body. The division of the Association into sections is based upon the idea that there are special lines of work which interest special men



PROF. TRUMAN W. BROPHY,

Vice-President National Dental Association.

more than other lines would attract the same men. In this instance the subject of the paper, however important and however well treated, was one in which only a limited number would take even casual interest. It is a fact often overlooked by students of deep science that their work is vastly more interesting to themselves than to men who have not devoted long hours to study in the same field. It is presumable that every man who really wanted to hear this paper was a member of the section which presented it, and consequently had it been read only in the section it would have received fully as much real attention and discussion as it did before the whole Association, while the reading before the full body occupied time which many thought, and did not hesitate to state, could have been better employed.

To sum up we must conclude that Dr. Thompson's paper was admirable, a proper communication to the National Association, and a valuable contribution to our literature, which we will feel proud to see printed in our transactions as a product of American research. Nevertheless, it should have been read in the section only, its reception by the main body indicating that hereafter the papers read before the full Association should be selected not so much because of their scientific excellence, as because of their general attractiveness to a large number of members, and especially where they promise to bring forth a good discussion, always the most important feature of a good meeting.

"Antiseptic Surgery," Dr. W. H. G. Logan.

As an example of a scientific paper which nevertheless attracted general interest, eliciting a good discussion the contribution of Dr. W. H. G. Logan may be cited. This was entitled "Antiseptic Surgery of the Face and Mouth." Through the courtesy of the *Dental Cosmos* we are enabled to present a liberal abstract from the paper.

"We shall now pass to the consideration of the probability and possibility of gaining and maintaining a condition of a surgical wound in the oral cavity after an operation, so that infection will not take place from the pyogenic bacteria ever present in the fluids of the oral cavity. Although a quarter of a century has elapsed since the value of aseptic and antiseptic methods of general surgery were brought forward, the benefits derived in following these principles in treatment of external wounds can be found in all text books of surgery of recent date at great length, while the methods and procedure necessary to gain and maintain a medium in and about a surgical wound of the mouth, has been dismissed with but a line or so, if mentioned.

"What precautions should be taken to prevent the bacteria which are present in the saliva that bathes the wound constantly, from prolifera-

PROF. EDWIN T. DARBY,
University of Pennsylvania.

tion? This fluid is ordinarily alkaline, which is a perfect medium for the streptococci staphylococci and pneumococci which are the main pus-producing germs found as a rule in this field. Cannot the proliferation and activity of these pyogenic germs be best deterred in this field in their dire effects by changing the normal secretions from alkaline, or by producing a condition that will prevent the development of these bacteria; or if we can by any harmless method maintain a mild acidity of the fluids which bathe the surgical wound of the mouth constantly without toxic effect, or by the presence of free oxygen upon the wound's surface, would we not gain asepsis of the oral cavity? With the hope of changing the alkaline condition to one of acidity the powdered acetate of potassium was dusted on the wound's surface made in two dogs' mouths for this experimental work with the idea in view that the salt would decompose and thereby leave liberated acetic acid on the wound's surface. The wounds in the mouths of the two dogs thus treated healed without undue inflammation, and no infection taking place, looked fresh and clean at each application. Dog No. 1 wound healed in nine days, dog No. 2 wound healed in ten days. We experimented also on two dogs with similar wounds in cheek with the bacilli acidi lacti. The wound was infected with this bacillus for the purpose of having ever present over the wound surface a slight acid secretion. Sugar was used with the bacteria merely to dilute it. These wounds healed a trifle slower than those upon which the acetate of potassium was employed; wounds closed in eleven days. Discharge of secretion rather pronounced, yet no infection took place; the wound ever fresh and clean at the various applications.

"The next two dogs under treatment with like wounds had dusted over the part oxychlorine, with the hope of having oxygen liberated constantly on the wound's surface, which would prevent the development of bacteria. The oxychlorine treatment in case No. 1 did not prevent the formation of pus; a slide made during the second day showed the presence of streptococci and staphylococci; yet the infection lasted only two days, while the wound healed in ten days without formation of scar tissue. The second dog's wound from like treatment healed in nine days, and showed a beautiful clean surface at all times. The various wounds were treated three times daily.

"This experimental work was carried further by making like wounds in length and depth again in the mouths of these dogs and infecting them with a virulent culture of staphylococcus pyogenes aureus. Wounds were not treated until next day, so that perfect opportunity would be given for growth of the bacteria. The wound under treatment with

DR. J. N. CROUSE,

President Dental Protective Association.

oxychlorine on the second day of treatment showed inflammation and great quantity of pus, while the slide made showed the presence of staphylococci. This inflammation did not cease increasing until the ninth day of treatment had passed, while the pus began to decrease at the end of the seventh day, ceasing in ten days more. Dogs under oxychlorine treatment had to be fed upon a bread and milk diet for twelve days, as a result of the great inflammation in the cheek tissue. In the cases where potassium acetate was employed the inflammation and infection increased for a period of five days, yet the slides made showed the same infection as in the preceding case. The inflammation and pus secretion practically ended after eleven days, infection controlled in fourteen days.

"We now pass to the review of the experiments where the wounds after being infected with the same virulent culture of staphylococcus pyogenes aureus. The slides made the following days showed the same infection. These wounds were again infected on the following day with another culture of bacteria using the bacilli acidi lacti and sugar, which was dusted on the wound's surface. Slight inflammation about the wound's edges appeared during the fourth day; from the afternoon of the fifth day the inflammation began to increase slowly for three days. When eight days of treatment had passed, the inflammation and infection was rapidly subsiding, and on the morning of the tenth day the wound presented a fresh, clean surface with but slight oozing of secretions, and on the evening of the eleventh day after the wound had been dusted with lactic acid producing bacillus the slides made showed the wound to be free from infection and was healing kindly.

"Then the wounds which were infected with the pus producing germs and treated by oxychlorine potassium acetate and the lactic acid producing bacteria (bacilli acidi lacti) showed in brief the following conditions.

Under oxychlorine the infection was controlled in	17 days
Pronounced inflammation present	14 days
Pronounced swelling present	12 days
Bread and milk diet	12 days
Under potassium acetate infection was controlled in	14 days
Pronounced inflammation present	6 days
Pronounced swelling present	4 days
Soft food as diet	4 days
Under bacilli acidi lacti and sugar infection controlled in	11 days

Pronounced inflammation not present.
Pronounced swelling not present.
Regular diet throughout.

DR. CHARLES A. MEEKER,

Secretary National Association of Dental Examiners.

"We are led to assume that the reason that wounds under treatment of the lactic acid producing bacillus and acetate of potassium did so well was because we were able by this procedure to create and maintain more constantly over the wound surface a slight acid condition instead of an alkaline or neutral one.

"In closing I wish to say, I shall carry this experimental work further on similar lines, including treatment of pus pockets and suppurative conditions which we frequently find about the roots of teeth, using potassium acetate and the lactic acid producing bacillus to see if we cannot control more quickly the infection in these parts.

"Thus is recorded briefly the results of a few experiments which were aimed at the noble cause of gaining asepsis of the oral cavity."

"Art in Dentistry," Dr. Mary E. Gallup.

Dr. Mary E. Gallup, of Boston, had the honor of being the first woman to read a paper before the National Dental Association. As woman may be said to be man in the most beautiful, artistic, and refined form of the genus, it was not surprising that Dr. Gallup should offer a plea for higher ideals, and more artistic achievements in prosthodontia. She claimed that the teeth offered by manufacturers are far from ideal and that they are departures from natural forms. In this connection she advanced a thought which should be well considered by all who essay to insert artificial dentures. Even were artificial teeth to accurately imitate normal forms of natural teeth, they still would be inadequate to meet the needs of artists in prosthodontia, and for this reason: The teeth however beautiful in form and arrangement at the time of their eruption, are altered both as to form and position with advancing years. The changes occasioned are the results of the temperamental habits of the individual, so that the form and position of a tooth is to some extent, an index of character. This should be closely studied and the normal condition accurately imitated, when partial dentures are introduced, while a close student of temperamental characteristics of teeth will be able to produce even full dentures accurately adapted to the requirements both of mastication and expression. Dr. Gallup explained that in utilizing the teeth on the market she frequently selects teeth from several sets, and of several shades, while even these are ground into such shapes as she deems requisite. Where the desired style of tooth can not be had in this way she makes a model in plaster and then carves and bakes a tooth to meet her case.

This paper cannot but prove an impetus towards progress and Dr. Gallup's association with Section one must act beneficially upon the work of that section.

DR. M. L. RHEIN,
Lecturer, University of Pennsylvania.

"New Removable Crown and Bridge," Dr. W. E. Griswold.

Dr. W. E. Griswold, of Denver, read a paper entitled "A System of Removable Bridgework." This is a novel and ingenious application of the glove button snap to dentures. For its use it requires two or more roots for bridgework, while it may also be utilized in single crowns. The root end is capped with a platinum cap on which is a platinum split spring button, similar to one-half of the device now almost universally used on gloves, and to some extent on men's suspenders, as well as in other places where a good lock fastening is required. Over this spring button fits the clutch which by a little force passes over the split spring button and then firmly grasps the shank. The essayist exhibited a full rubber denture held by these attachments to four roots; also a continuous gum piece carrying the four incisors, and restoring the lost soft tissue, the piece attached to two roots. It is manifest that the application of this method demands some means of setting the button caps so that they shall be absolutely parallel, and this is accomplished by an ingenious device of the author's invention.

During the discussion Dr. Crouse took the floor to describe a new removable bridge, which had recently been brought to his attention. He stated that the piece had originally been intended as a fixed bridge but that the piers had gradually loosened until the patient found it possible to remove the bridge, roots and all. Since that time the patient had continued using the bridge as a removable piece, replacing the roots in their sockets when in the mouth. In spite of Dr. Crouse's war on bridge patents it was hinted that he would himself take out a patent on this method with the idea of making the use of such a device impossible for the future by demanding very high license fees and royalties.

"Painless Pulp Removal," Dr. E. T. Darby.

Dr. E. T. Darby, of Philadelphia, during a lull in the proceedings took the opportunity to give the members a new method of extirpating a pulp painlessly without resort to arsenic. The method depends largely upon a new syringe recently introduced from abroad. This is a glass hypodermic syringe, being simply two glass tubes telescoping, the contiguous surfaces ground so accurately that no leakage occurs. It is the most antiseptic and satisfactory hypodermic yet offered, there being no parts to get out of order, except by breakage, and no parts that may be destroyed by corrosive chemicals. The cannula is of metal into the end of which the syringe fits. The method involves the placing of the point of the cannula in contact with the pulp, where it is held by packing around it gutta-percha. The syringe is then filled with a solution of equal parts of carbolic acid and chloro-

PROF. GEO. V. I. BROWN,
Milwaukee Medical College.

form. The syringe is placed in the cannula and gentle pressure exerted for from three to five minutes. At the end of this time the pulp may be removed painlessly. Dr. Darby has thus operated in twenty-seven cases without failure.

Interchange of State License.

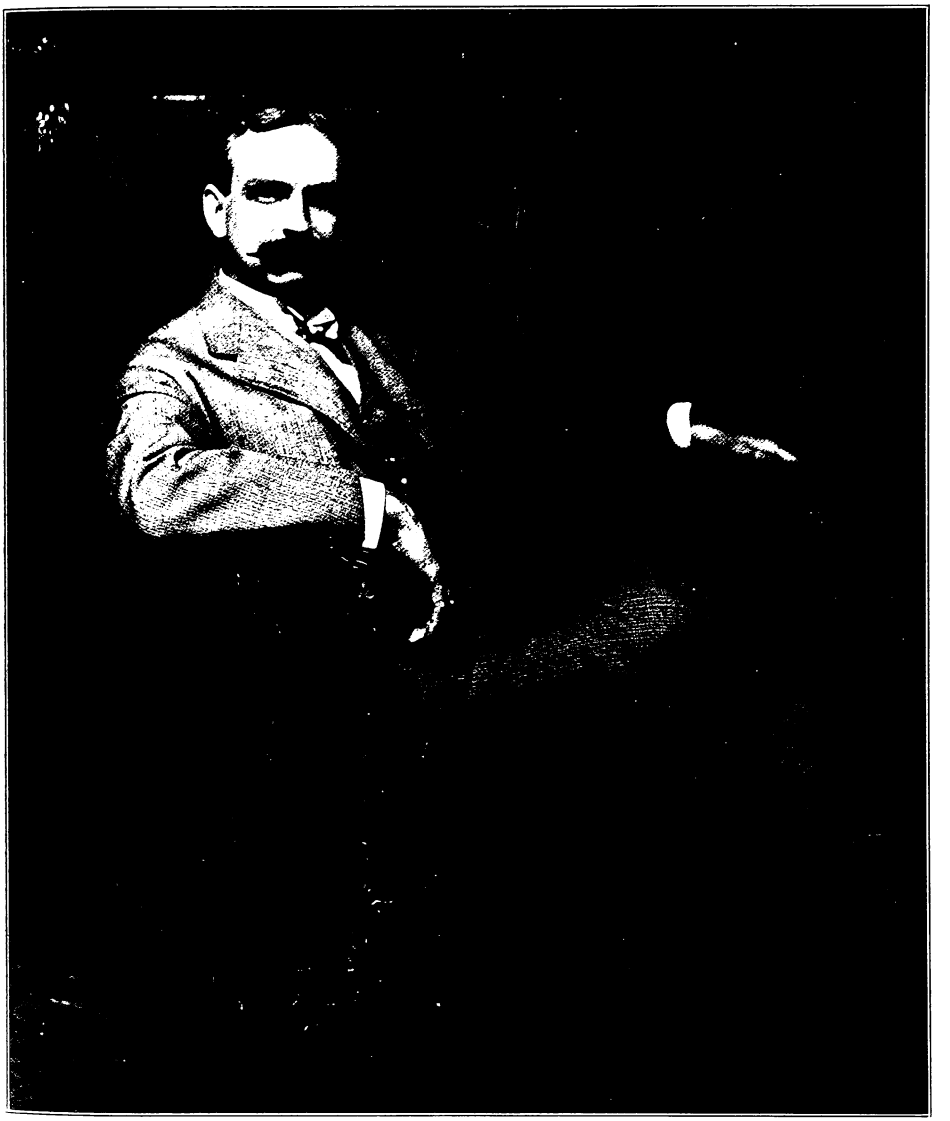
The Committee on Interchange of State Licenses made a report to the National Association outlining a plan for interchange of State licenses which by vote of the Association was endorsed and recommended to the consideration of State Societies, State Examining Boards and the National Association of Dental Examiners. Following is the plan:

"First, an interchange of licenses between those states exacting the highest educational requirements. Under the present laws it is possible that this class would include New York, New Jersey, Pennsylvania and Michigan. There is, however, an element of doubt in relation to the status of interchange in these states, mainly because of the stringency of the New York law whose requirements are thus stated in Bulletin No. 9 of the College Department of the University of the State of New York, recently published under direction of Mr. James Russell Parsons, Jr., of the Regents of the State of New York.

"The applicant must furnish evidence that he has a general education equivalent to a full high school course, and he must have received a degree from a registered dental school or a medical degree with a special one year course in a dental school, or a foreign diploma from registered authority."

"New York has already agreed to interchange of license with the State of New Jersey, but this is based upon an interpretation of the New Jersey law made by the New Jersey Board, which interpretation would probably not be sustained by the courts if resisted by an applicant for license in that state. The subject is touched on, on page 753 of the "Bulletin" referred to above, where it is stated that the New Jersey statute demands "a preliminary education equal to that furnished by the common schools."

"The New Jersey Commission construe this to mean 'graduation from a high school,' and on this representation interchange of license has been granted. It is very doubtful, however, that this position is legally correct, as high schools are not a part of the common school system throughout the state, being situated only in a few large cities. A citizen from a smaller community in New Jersey, having obtained the full common school education of his locality, and having a diploma from a dental college whose preliminary requirements did not debar



PROF. C. N. JOHNSON,
Chicago College of Dental Surgery.

him, could probably demand an examination for license from the State Board, and obtain it by order of a court, if refused. However, until the construction of the law maintained by the Jersey Commission is upset, the interchange of license with New York will continue. The application of Pennsylvania for interchange with these two states is under consideration. The recent action of the University of Michigan in elevating its preliminary requirements to the equivalent of high school graduation makes that state a possible candidate for admission into the license agreement with the three states named, though some alteration of their state law would be required before they could be accepted under the laws of New York.

"The second feature of your Committee's plan would establish an agreement as to interchange of license between those states which require college graduation as a prerequisite to examination for license. Under this agreement would be included Colorado, Florida, Delaware, Georgia, Kansas, Maryland, Oregon, Wyoming, Washington, Minnesota and Connecticut. Washington and Connecticut have features of their laws which would probably need alteration before they could be included in this agreement. Connecticut examines practitioners of three years and Washington those in practice ten years. A similar clause is in the Minnesota law, but as it reads "ten years prior to 1889," it could well be overlooked.

"Thus in the second class we would have eleven states who might agree not only to accept the licenses of the states in this class, but also the licenses of those states in the first class, viz.: New York, New Jersey, Pennsylvania and Michigan.

"Lastly, the states not included in either of these agreements might accept licenses of any of these fifteen states. What would be the inevitable result of such a procedure?

"First, there could be established within a very few years an interchange of licenses between a large number of states on an equitable basis. Second, we would find that the eleven states which accepted the licenses of the four states exacting higher standards, realizing that they were giving where they were not receiving, would as rapidly as possible undertake to elevate their standards so that they might obtain recognition from the states of the first class. In similar manner the states of lower requirements finding that dentists from other states might come to them, while their own men were obliged to remain within their own borders, would amend their laws so as to require college graduation as a requisite for license, which would entitle them to admission into the interstate agreement of the states of the second class.

PROF. H. J. GOSLEE,

Chicago College of Dental Surgery.

"Two features of this plan are respectfully emphasized. First, that it offers a scheme for interchange of license, which does not demand any elaborate change of existing statutes, and which, therefore, might be realized in the near future. Second, that while establishing interchange of license, the plan exerts a moral and political influence towards higher education."

This plan was considered by the National Association of Dental Examiners and referred to the Committee on Unification of State Laws.

Possible Elimination of Politics.

In connection with the election of officers the usual political methods were painfully in evidence. Men were seen going about with lists upon which they recorded the names of those from whom they had obtained pledges to vote for the candidates for whom they were electioneering. In justice to the membership of the National Association it should be said that the majority do not approve of this means of electing our officers, but as no plan has heretofore been offered which promised to eradicate the evil, it has seemed useless to do more than protest. In a discussion with a few men, gentlemen more devoted to dental progress than to office seeking, the following plan met with much favor. Some of those present declared that they will attempt to apply the system in their state societies. The plan is as follows:

First. At a proper time in advance of the meeting the Secretary communicates by mail with all members asking for nominations for the various offices.

Second. A printed ballot is prepared, all the nominations for each office appearing on the ballot.

Third. These ballots are mailed to all members in good standing on the Treasurer's books. The members mark the names of those for whom they choose to vote, and return to the Secretary, who announces the result of the election at the annual meeting.

There are two variations of one feature of this plan. One is as above, where those in good standing at the time of the mail election are permitted to vote. In the other, all ballots are signed and held by the Secretary until the day of election at the annual meeting, when he counts the votes only of those who pay their annual dues. The following features of this plan are worthy of consideration. It eliminates politics. It arrives at the real choice of the whole Association. It gives every man a vote whether present or not, provided his dues be paid.

Snap Shots.

The title of this report, "Snap Shots at the National Association" means not only a terse presentation of the work accomplished, but likewise the reproduction of photographs of prominent men taken at the meeting. These are men of wide reputation, and it will undoubtedly prove interesting to many who have never seen them to get an idea of their countenances. Besides those presented, a number of others were taken, two or three of which were not sufficiently good for reproduction, while one or two others were spoiled by the "office cat." This animal with more curiosity than wisdom leaped into the tub in which the photographic plates were washing, with the result that his claws "retouched" some of the negatives in a style other than artistic.

R. O.

Need for Correcting Abuses in the Use of Amalgam.

By Dr. B. F. Arrington, Goldsboro, N. C.

Possibly there is no subject pertaining to the practice of dentistry at the present time, that demands more careful thought and unprejudiced consideration than the use of amalgam.

The general use of amalgam is much slighted and abused through careless and indifferent manipulation in the hands of old as well as young practitioners. I shall write plainly on this subject, because there is need for it, and will state facts that cannot be successfully refuted.

The abuses, in practice that prevail and are harmful in effect, must receive attention and be corrected before amalgam as a tooth-preserving material can be rightly appreciated by the profession or the public. For three-quarters of a century or more, amalgam has been used for filling teeth in this country, and all the while handicapped through ignorance, indifference, prejudice or cowardice, and sometimes, possibly, all combined, with results following that have proven seriously hurtful as an impediment to true progress.

With the first proposition to use amalgam, there arose strong opposition. The history of the prolonged contest for and against the use of amalgam is familiar to many now engaged in practice. It entailed evil consequences, which we now have to fight and remedy.

Arrayed against the use of amalgam were many of the best and most prominent men then engaged in the practice of dentistry, and their influence, though in error, was so great as to control general sentiment and action on the subject for some years. Many who had espoused the cause of amalgam, completely backed down and abandoned use of it. Some of those who continued to use amalgam and others following after them for many years, used it rather secretly, very indifferently and in many cases most abusively, making no effort whatever to improve the material or use of it, owing possibly to lack of knowledge and proper education on the subject.

The advocates of amalgam gradually strengthened in their convictions, and new converts were rapidly enrolled until there was confidence and boldness to sustain open advocacy of the free use of it. The increase was so rapid for several decades, that dental colleges took courage, and some of them in the face of strong prejudice decided to impart instruction to students in the use of amalgam as in the use of gold.

It is to be regretted that most of them failed to instruct faithfully for attainment highest of results, and herein to some extent, possibly, lies the secret of the present state of neglected and abused amalgam work. Had all the colleges generally demonstrated more interest in the subject, and labored more earnestly in imparting instruction in use of amalgam, the result in contrast might have been very different.

All these years of open endorsement of the use of amalgam and college instruction, the effort for improvement and a higher order of amalgam work has not been as advancing and as praiseworthy as the subject merited. We are now but little further advanced in the general use (improved modes) of amalgam, than several decades ago. Daily observation of defective work, executed by young dentists just from college and men more advanced in years, of note and high standing in the profession, justifies the assertion. My observation, doubtless, is the observation of hundreds in daily practice.

In speaking of the neglect of duty and the ommissions in dental colleges, it is pleasant to be able to state that there are some honorable exceptions. When more of the faculties in our colleges realize and acknowledge the true value of amalgam as a filling material, and the need of more thorough instruction in use of it, and will see to it that all demonstrators instructing in operative dentistry, and their assistants, directing students in the use of amalgam, are well prepared and competent to instruct on best and most approved lines of practice, requiring of students as earnest effort for tooth preservation with amalgam, as when using gold, we will feel that light is dawning.

When a thorough and true course of practical instruction is imparted to students in colleges pertaining to use of amalgam, as is the custom pertaining to use of gold, thousands of teeth will be preserved daily, that are now sacrificed through indifferent manipulation of the material, and lack of throroughness in preparation of cavities. The effort for equal results in use of gold or amalgam should not vary, as the object in use of either is to perpetuate utility of the natural teeth.

Use of Amalgam Should be Taught in College.

Since amalgam is an acknowledged factor in dental practice, young graduates commencing practice should have been so educated to the idea of holding it in right esteem as a useful tooth filling material, as not to question for a moment, the propriety and neccessity of acceptance and intelligent, faithful use of it in treatment of teeth, and not to feel as most now do, for want of legitimate and proper instruction, that amalgam is only a second rate material.

Under some circumstances, amalgam may be properly classed second rate, but when there is need for use of it, and it is rightly used,

and gives results more favorable and satisfactory than could be obtained with gold, then it should be classed first rate, and all credit due should be generously given to the material and the dentist using it.

It has been less than two years since I heard a young dentist say he had recently, in less than three hours' time, in a dental office, learned more about the correct use of amalgam and the value of it as a filling material, than he had learned during his three years' term at college. He also stated that during his two days anxiously spent before the State Dental Examining Board, with others in as nervous a state as himself, he never heard the subject of amalgam mentioned or in any way alluded to by a single member of the Board. Truly, a severe criticism, but possibly just. There may be many young beginners in practice who could truthfully make a similar assertion. The question presents, how is such a state of affairs to be remedied?

It is evident that we must appeal to the dental colleges to give more thought and attention to the subject. There the work of improvement in use of amalgam must begin and continue. The college that leads in this work, will act nobly in a good cause, and doubtless will be rightly rewarded.

There is no disputing the fact that amalgam is essential in dental practice, and the use of it is increasing; possibly five or even more fillings of amalgam to one of gold are inserted daily.

In course of college instruction, students must be informed and forcibly impressed with the fact, that painstaking care and best manipulative skill is as essential for creditable and satisfactory results in the use of amalgam, as in the use of gold or any other material, and equal care should be given to preparation of cavities and pulp protection against thermal changes; in short, to put forth best efforts for best results from commencement to completion of operations, and to regard a tooth successfully treated and filled with amalgam, when use of the material is indicated, as useful and valuable to the possessor, and as creditable to the dentist as is filled with gold. Also, that it is the privilege and duty of a dentist to use his judgment and discretion in the selection of filling material for respective cavities, and as judgment directs, that do, with honest purpose and effort to preserve teeth.

For the Good of the Profession.

By JEAN CLINE, D.D.S., Portland, Oregon.

A matter of serious import to us as members of the dental profession is the growing tendency among many practitioners, the old included with the young, to don the robes of charlatans. It is serious because it threatens to destroy our professional standing. It is serious because it will not only destroy our professional standing, but even our profession itself. Even now many medical men refuse the recognition due us as professional men and brothers.

The causes for quackery are many, the results but one; the degradation not only of the profession, but of the individual as well. In his desire for immediate financial returns, he forfeits, always providing he has any, his self-respect as a man, for certainly no one can use the methods he employs for gain and ever afterward enjoy that restful mental quiet that is an attribute only of those who are conscientious and sincere. A predisposing cause for quackery is the lack of a proper dental education, and lacking such, the practitioner, like water, seeks his level, which, in the majority of cases brings him to the low water mark attained by quacks. Yet, we not infrequently find among the young men of today who do not possess the opportunity for acquiring a proper professional education, or come into our ranks as the result of a meagre State Board examination, a few whose natural pride tends to raise them above the drifting scum, and would, were the proper example forthcoming, or the improper be not so conspicuously evident, become legitimate members of the dental profession. The majority of these men are found in our laboratories or as our assistants, picking up their education as best they may. The molding of their future course may be greatly influenced by the example set them at this time.

I therefore claim, always providing, of course, that the material is of the proper sort, if such a man disgraces his profession, the brunt of the blame and censure should fall not alone on him but should be divided equally with his preceptor. It should be the self-evident duty of any practitioner who has an assistant under his jurisdiction to instruct him in all things pertaining to the proper practice of dentistry. To guide his footsteps towards the clean course of an ethical practitioner. To discourage those whom he clearly sees will develop unsuited to practice, or incapable. To encourage genius with the reward of praise, and above all things, to advise and assist him in his desire for an education.

I do not offer this contribution as a solution for the perplexing problem of non-ethical practice, but simply as a call to the duty we owe our profession and ourselves. We can in many ways instruct not only those directly subordinate to our wishes, but by our actions and example scatter broadcast the seeds of morality, and I am sure the results obtained will in every instance be an ample reward for our endeavors.

Legitimate competition, to an able man, acts simply as a pacemaker, urging him on to a stronger endeavor, and in all cases should be courted rather than shunned. Opposed to this, is the competition of quacks which invariably will retard our progress, debase our methods and defile our practice, relegating a noble profession to the meaner ranks of trade.

In view of the above, I doubt if any one will disagree with me when I say the *reveille* is calling us to the defense of our profession, and every man should don the buckler of self-respect and willingly lend his all to the struggle of our profession to maintain itself as a profession and not as a trade.

Treatment of Fractured Teeth.

By Frank G. Gregory, D.D.S., Newark, N. J.

Read Before the Central Dental Association of Northern New Jersey.

Having been called upon very frequently during the past years to restore to usefulness a class of teeth most discouragingly broken down through accident and decay, and being inclined to cater to the whims of patients desirous of retaining their natural organs, it is with no small amount of satisfaction, the system, or rather the method of treatment to be outlined in this paper, is presented for your consideration this evening.

It has been the experience of the writer that the teeth most frequently fractured are the incisors and bicuspids of the upper jaw. These teeth usually have a history of having carried large approximal fillings, or of having supported artificial crowns. The bicuspid teeth generally become fractured by accidental occlusion upon some hard substance, such as a splinter of bone, lead bullet, etc., and not infrequently the palatal portion of the crown gives way, involving the inner cusp, and extending sometimes a distance well under the alveolar ridge. That this is a very common condition of affairs, one need but to examine the mouths of a number of adults, to find that at least fifteen or twenty per cent. of them have lost one or more cusps, and the characteristics of these teeth have been materially changed in the effort to preserve the remaining cusp; no effort in many instances having been made to build up a cusp mechanically to restore the masticating surface lost.

The incisor teeth to succumb, are the frail roots of the laterals carrying metallic posts, supporting artificial crowns; especially those crowns not reinforced by a continuous band. It is my firm belief that these teeth (lateral incisors and bicuspids), so often the first to give way under a carious influence, should be the especial care of every operator, in the hope that fewer dentures shall be minus these desirable members, and gold crowns be denied the embrace now so commonly indulged.

Old Methods. When a patient presented with the condition such as outlined, it was the accepted practice to make a gold shell, so fitted as to draw the fractured parts together or fit a gold band around the tooth, cement in position, dismiss the patient with the parting advice that "the best possible has been done for the tooth and we hope it will prove serviceable." Should the case be at all complicated, the detached portion was extracted and the operator's hands washed, while his conscience not being so easily appeased, disturbed him for many an hour for having sacrificed part of the human anatomy having a just claim for continued usefulness.

While many cases so treated have given a good account of themselves, it is not at all infrequent to find the soft tissues inflamed and a suppurative condition always present. This is easily explained by saying it was impossible to draw the parts together thereby preventing the irritation set up by the sharp edges of the parts extending beyond the ridge of alveolar process. The whole procedure was looked upon as a mechanical operation not thought of more than this was involved.

Believing something more than was customary should be devised for the relief of this class of patients, and having very many such cases to deal with, it gives me no small amount of pleasure to be able to state that a satisfactory solution has been reached. It might not be amiss to relate the history of the particular case resulting in a device so simple, so efficacious, and withal, so satisfactory:

New Methods. Miss ————, while away from home, attending college, having some slight disturbance, presented herself at the office of Dr. ———— for his advice and treatment, the right superior second bicuspid having a filling in the distal approximal surface somewhat loosened. This was removed and the cavity washed with a mild antiseptic, after which an oxyphosphate filling was inserted. On returning home during the next vacation period, the young lady having been under my care for many years, requested an examination of her mouth and teeth, not only to discover possible cavities, but to locate the source of a disagreeable taste of which she was conscious. Carefully subjecting each tooth to thorough examination there was found to be a slight discharge when pressure was exerted upon the soft tissues adjoining the bicuspids on the superior right side, no apparent cause being exhibited. Thinking the root canal might not have been properly treated, the filling was removed, and in attempting to make a satisfactory exploration with a Donaldson broach, to my surprise, there was no limit to which that broach would extend, demonstrating a longitudinal fracture involving the entire length of the root. What to do I knew not. The cusps were in proper relation, not having

separated perceptibly. How to get the deep-seated portions in juxtaposition was a problem. Of necessity something must be done to retain the tooth, and that quickly, owing to the forced return of the student. The following plan suggesting, it was deemed wise to make the experiment. With a long slender drill the crown was perforated from the buccal surface, a second perforation being made at the neck of the tooth, just under the free margin of the gum, and a third perforation made about a quarter of an inch above the gum line; gold screws the exact diameter of the drilling instrument were made and introduced, after having tapped the perforation so as to engage the screw; the length of the screws under the gum was first determined and all the screws introduced evenly and the parts firmly bound together; after trimming and polishing the exposed ends of the screws, there was no visible evidence of the tooth having been operated on, save what appeared to be small fillings on the buccal and lingual surfaces of the crown. The crown was refilled, and after a local application to act as counter-irritant, the patient was dismissed. A lapse of four months finds the parts in a healthy condition and the discharge completely eradicated. Encouraged by such flattering success with my first and most difficult case, all similar conditions having been similarly treated and with equal success. There are many considerations involved, and the recitation of various cases treated, would lengthen the paper without lending interest.

There is a vital consideration which, in my practice, has not been demonstrated as yet, but will be established I have no doubt. Teeth having living pulps, frequently sustain injuries, resulting in the loss of a portion of the crown; where the violence is not great enough to cause the death of the pulp, it is not beyond reasonable expectation, if the fracture be a simple one and the lost portion recovered, they could be held in their proper relation, using this method until union be established by a process similar to that of the other osseous tissues.

Dental Echoes from the American Medical Association.

By Alphonso Irwin, D.D.S.

Read before the Southern Dental Society of New Jersey in Camden, June 20, 1900.

Let us consider in a general way Stomatology and Stomatologists and look at Dental Education and Interstitial Gingivitis as viewed through the eyes of the Section of Stomatology of the A. M. A. at Atlantic City, June, 1900. Time and space forbid entering into details, extensive research or scientific discussion.

The topics discussed at the dental sessions of the A. M. A. were "Dental Education" and "Interstitial Gingivitis or So-Called Pyorrhea Alveolaris." The series of papers on Dental Education embraced the following subjects: "Relations of Dental and Oral Surgery to General Medicine," "Professional Status of Properly Educated Dentists; "Preliminary Qualifications, Course of Study, Methods of Teaching;" "Shall the Dental Student be Educated Independently of General Medicine?" "Is Medical Education a Necessary Qualification for Dental Practice?" "Practical Value of a Medical Education in Dental Practice;" "Technical Training Versus Theoretic;" "Should the Medical Undergraduate be Instructed in the Principles of Dentistry;" "Post Graduate Study in Dentistry and Degrees Therefor;" "The Handwriting on the Wall, Limitations."

The papers on Interstitial Gingivitis, or so-called Pyorrhea Alveolaris, comprised "Etiology;" "Neurotic Affections;" "Indigestion;" "Autointoxication;" "Chemical Factors in Etiology;" "Constitutional Treatment;" "Local Treatment;" "So-Called Glands in the Peridental Membrane;" "Evolution of Decay Continued;" "Co-operation of Public Schools in Teaching;" "Good Teeth, Good Health;" "Whatever We Wish to See Introduced Into the Life of a Nation Must First be Introduced Into Its Schools;" "Oral Surgical Operations."

There were nineteen essayists, twenty-three essays and one address by the Chairman of the Section, M. F. Fletcher, of Cincinnati, Ohio. They came from all parts of the United States. The majority of the dentists were from the West; ten were from Chicago, Ill. One was a woman, Alice Stevens, from Chicago. They held chairs on dentistry in universities and medical and dental colleges. They were men of established reputations and famous in their calling, most of them being authors of text books and well known writers on dental subjects.

The essays displayed remarkably scholarly attainments, acuteness of intellect and profound scientific research.

It is to be hoped that as these and other dental echoes from the A. M. A. reach us they will act as incentives to greater exertion for the maintenance of a higher standard of mechanical and professional skill and the acquirement of a broader and deeper knowledge of dentistry and the allied sciences. Our profession must not be divided into two opposing factions representing extremes of thought and training. The stomatologist and his science must not be arrayed against the *dentist* and his *practicality;* but the two, science and practicality, should be blended in harmonious union, crystallizing into the highest type of a profession and producing the ideal dentist.

Dentistry as a Specialty of Medicine.

The association of the medical and dental professions together is not popular with the majority of dentists. Neither is it popular with the majority of the medical practitioners to class dentistry as equal to the practice of medicine. The dentist's ideal is an independent profession. The physician's ideal is dentistry under the control of and secondary to the medical profession. Notwithstanding the fact that these two antagonistic ideas have been advocated by their respective champions for many years and able and exhaustive opinions have been written on the subject the status of the dental profession remains unsettled. The section of Stomatology of the A. M. A. agreed that dentistry is a specialty of medicine, the same as ophthalmology, laryngology and gynecology and as such are entitled to all the respect due to skilful and learned professions. When this decision is accepted and practice conducted on this basis by the medical profession then the status of stomatology will be settled. If dentistry is an art and has practicality only for its basis then the dentist is an artisan. He possesses manual skill alone and should therefore be rated as a mechanic. His work should also be performed under orders from the superior intelligence of the physician who is educated both in the science and art of treating the human body. But if dentistry is a science as well as an art, which we claim it to be, then the dentist's education should be equal to the physician's and his rank in the world should be the same as the physician's, and they should meet in consultation on an equal footing, in cases requiring the treatment of the teeth and other organs of the body at the same time. The physician should consult the dentist the same as he would consult the aurist, the oculist, the laryngologist or the gynecologist in cases complicated with one of their respective specialties. Conversely the dentist, the aurist, the laryngologist and gynecologist should consult the physician in regard to cases requiring systemic treatment and feel that they are specialists in one grand profession and meet on equal terms one with another. This is sound reasoning.

Six out of twenty-four papers were devoted to the relation of dentistry to medicine and vice-versa. Its importance appears to be great in the estimation of our dental educators. Possibly holding a chair in a medical college may have something to do with this feeling.

In selecting a name for the section they have rejected the shorter and simpler term Oristry (derived from the Latin word ora, the mouth), and adopted the term Stomatology (derived from the Greek word στομα, the mouth and λογος, a discourse). The word stomatology possesses the merit of being self-explanatory. It means literally a dis-

course on the mouth. You are supposed to know that the teeth and their treatment are included.

Here we perceive that the scope of the work of the dentist is increased. The new dentist is supposed to treat the mouth as well as the teeth. This fact in itself will not commend new terms and ideas to the minds of many dentists. They will adhere tenaciously to the belief that the dentist's business is to attend to the teeth and that any departure from treating these organs immediately takes the dentist out of his vocation and he becomes something else. For instance, he would say, that the stomatologist is not a dentist; he is an oral surgeon. The conviction also forces itself to one's mind that the physician will continue to practice medicine, the stomatologist will practice oral surgery and the *dentist* will continue to practice *dentistry*. *Common sense will triumph over learning.*

Commercial Spirit. The stomatologists along with other advanced thinkers and educators, have made most emphatic protest against the commercial spirit in dentistry. It is a stubborn fact that the demand regulates the supply, in dentistry as well as in the commercial world. The public want more practical and less professional work. When you get down to the hard facts the physician, the lawyer, the editor and even the minister cater to the will of the public and yield to the commercial spirit. What better then can you expect of the dentist? He has to earn his living, pay his rent and clothe himself.

When the commercial spirit comes into contact with the other extreme, the spirit of science and learning, then the following results should be produced: It should be the mission of the spirit of learning to purify and elevate the commercial spirit and the aim of the commercial spirit should be to seize upon and utilize the spirit of knowledge in every-day life. It would also seem that the commercial spirit should be praised in so far as it compels a dentist to seek and obtain sufficient money to pay his debts and I believe that if anybody is entitled to a competency in event of disability or age the dentist is warranted in being greedy enough to amass one.

The four days' sessions of the section culminated in the adoption of a resolution the substance of which is:

"*Resolved;* That the Chairman of the Section of Stomatology appoint a committee of seven who shall use every legitimate means in their power to establish a chair of Stomatology in every medical college in the United States and secure the co-education of the dental and medical student."

The gist of this resolution is cited in order to combine this senti-

ment with the opinion frequently reiterated that "Dentistry Is a Specialty of Medicine." They naturally go together. They constitute the loudest "echoes" from the A. M. A. They will persistently appear in many places throughout this hastily written paper.

Preliminary Education.

Another "echo" which reverberates loudly from the A. M. A. is that the preparatory qualifications and education of the applicants for admission into our dental colleges must be made more thorough and enlarged and that the college course of training of the dental student must be lengthened.

In speaking of this verdict (which bobs up to the surface at every dental convention), the dissenting voice of Prof. Jas. Trueman of the University of Pennsylvania is worthy of great consideration. Prof. Trueman said: "I feel very strongly on this subject. I believe ultimately that the preparatory education will be enlarged and that the college course must be lengthened. But just in proportion as you do this, will you turn out *poorer* dentists. The dentist *should be educated at the chair and the bench.* My opinion is based on many years experience and observation as a dental instructor."

Manual dexterity is best acquired between the ages of sixteen and twenty-one years. It is much harder to acquire finger education necessary for extracting, filling and scaling teeth after the twenty-first year.

Few men can go through a literary or scientific course in college before they pass out of their teens and then they would enter a dental college handicapped by increased difficulty in acquiring the manipulative skill required to make good dentists.

In discussing this phase of dental education allusions were made to the American dentists as beautiful jewelers. But note the fact, everyone declared that he would not have the skill of the dentist lessened in this respect, but that he would emphasize the necessity for its being accompanied by a broader and more exact knowledge of the science as well as the art of dentistry. Mechanical genius or scientific acuteness of intellect did not enter as factors in their discussions upon dental education. A most astounding oversight. How would they educate a Bonwill, a Marshall Webb, an Evans?

This omission reminds us that successful training is subjective as well as objective. The word education is derived from the Latin verb *educo,* to lead forth and literally means to lead forth or develop what is in one's brain. You cannot lay down cast iron rules for education. You cannot educate a man into a mechanical and scientific genius where no foundation exists in the mind. Indeed our minds are often so limited that mechanical, scientific and literary ability in combination are rare.

The development of one often unfits our mind for development in the other departments of our business. Of the two choices one's preference would lie in being a *beautiful jeweler* and an amateur scientist rather than becoming an animated encyclopedia and a *bungling* dentist.

Great stress was laid upon the idea that the fundamental principles governing the human body are applicable to the mouth and the teeth and that the general laws controlling the action of medicines up on the organs and their functions are identical with the laws governing the action of medicines upon the teeth and the adjacent tissues. They argued that what is true of the whole body is also true of a part of the body, namely the teeth and the mouth. Therefore you might define stomatology as the science and art of medicine applied to the treatment of the mouth and the teeth.

In all the papers it was noticeable that no one could draw the line of demarcation where the practice of stomatology ended and the practice of medicine commenced. In the essays in dental and medical societies it appears as though three bull's-eyes instead of one, were set up. Sometimes they would shoot off their brains at one bull's-eye, a tooth, sometimes they aimed at another bull's-eye, oral surgery. And a third bull's-eye would obtrude itself upon the mental vision of the unsophisticated listener, namely the practice of medicine. The stomatologists erected three bull's eyes, at which their chunks of wisdom were hurled, it must be said, with admirable precision, if you will accept this figure of speech.

However, it makes no difference what figure of speech you employ; through whose spectacles you view the point, how strong the glasses magnify in those spectacles, or from what angle you make your observations. We all arrive at the same conclusion. Namely, no one knows where to draw the line of demarcation between the practice of stomatology and the practice of medicine or surgery. A radical difference indeed between stomatology and dentistry for the boundary line between the practice of dentistry and medicine is clear-cut and well-defined.

After the proposition "Should Dentists Receive a Medical Education" was discussed the topic was reversed and the question was viewed from an opposite standpoint, namely, "Should the Medical Practitioner be Educated in the Practice of Dentistry?" Dr. M. L. Rhein of New York city reviewed the subject in a very able and scientific manner. The result of the argument appeared to be in favor of the physician knowing more about dentistry.

The tendency of *some* physicians to speak slightingly of the dentist and dentistry was alluded to but promptly squelched. It was stated that the dentist had no right to complain of the medical practitioner on that

score for some dentists are even worse than the physician in exposing medical blunders and belittling medical skill. It was also claimed just in proportion as the skill and education of a dentist entitle him to the esteem of a physician, so will his opinions and operations be placed at their true value.

Many dentists can testify to the great courtesy and consideration which has been shown them by members of the medical profession. Honor and deference should be bestowed upon the physician by the dentist. If the physician does not reciprocate in like manner, the dentist by persisting in this course will heap "coals of fire" on the physician's head, and it will redound to his honor and credit many times.

Pyorrhea Alveolaris.

Part second of the Section of Stomatology of the A. M. A. consisted of four papers on the causes and two on the treatment of interstitial gingivitis. Four papers were of a miscellaneous character. An analysis of these essays and the discussions following revealed little that was new or remarkable in regard to the treatment of this disease. I watched keenly for something practical and helpful in the way of treatment, but heard only painstaking and minute scientific research.

Dentists are fast learning that *pyorrhea alveolaris not caries* of the teeth, is the most formidable disease which we have to treat and are expected to cure. We can treat and fill decayed teeth with success but the precentage of permanent cures of interstitial gingivitis or pyorrhea alveolaris is very small.

In classifying the etiology of the disease the usual constitutional and local causes were named: First, auto-intoxication (from the Greek *αυτον* itself and Latin *in* and *toxicum*, poison, the term meaning poison in itself) where an organ excretes a poison which is disease producing to itself and other parts of the body, as uric acid in the rheumatic or gouty diathesis. Chemical factors, medicines such as mercury, iodide of potassa, phosphorus and other causes of obstinate pyorrhea were duly inventoried. Intestintial gingivitis from syphilitic infection was ably described by Dr. G. Lenox Curtis of New York city. He claims to have always observed a peculiarly marked and characteristic lesion in the gums near the third molar where the pyorrhea was due to syphilitic taint; an exceedingly important sign which the dentist ought to be able to recognize in order to take additional precautions to disinfect instruments thoroughly and burn napkins or muslin used in that particular mouth.

Dr. J. H. Salisbury of Chicago read the most elaborate paper on the constitutional treatment of pyorrhea. He showed clearly and minutely how dependent diseases of the mouth are upon perverted functions

of distant organs notably the excretory organs, the skin, the kidneys and the bowels. The failure of these organs to completely expel poisons from the body is a prolific constitutional cause of interstitial gingivitis. In fact the mouth reveals by certain diagnostic signs the presence of disease in other organs. The efficacy of copious draughts of water, where the liquids expelled from the body are less than three pints (of urine) per day was pointed out and the necessity for stimulation or treatment of the kidneys was indicated.

His paper was a convincing argument in favor of turning such cases over to the physician without delay.

During the discussion which followed the reading of the paper the exquisite sensitiveness of the gums and teeth during the early development of pyorrhea and the consequent objection to scaling the teeth was referred to. Dr. Bogue's method of procedure in such cases is worth repeating. He makes a saturated aqueous solution of "Iodide of potash and iodine crystals (equal parts). Also a saturated aqueous solution of sulphate of zinc. Equal parts of the supernatant fluid from each saturated solution are mixed together and the product applied to the sensitive surfaces. The operation of scaling is then proceeded with as usual."

Washing out the pus pockets with warm water was unanimously endorsed, some even advocating the use of water only, after scaling the teeth and leaving nature to do the rest. The use of aromatic sulphuric acid as a solvent and stimulant in the treatment of pyorrhea alveolaris was disapproved by E. S. Talbot. Peroxide of hydrogen was lauded as the best wash for pus pockets.

Talbot's and other scalers with the draw cut were preferred in cleaning the teeth but the operator should use the instruments adapted to his methods of working and individual peculiarities. Absolute cleanliness of the mouth was of course regarded as imperative after treatment.

After the removal of the local causes useful adjuncts in the treatment of interstitial gingivitis, are tooth powders, mouth washes and the toothpick. The dentifrice which received the unqualified endorsement of the stomatologists is composed of seventy-five parts of finely powdered rice and cornmeal, eighteen parts of biborate of soda and seven parts of chlorate of potash, also saccharine, the proportion of which was not specified.

The use of medicated liquid wash was recommended by some and condemned by others, but no recipe was given. The usual objections were urged against the use of the wooden toothpick in dislodging particles from between the teeth and preference was given to the use of the quill toothpick.

Nomenclature. Permit me to refer to the terms employed by the Section of Stomatology of the A. M. A. A few have already been used and their derivation stated in order to refresh our minds. Let us examine others.

The classification of particular objects and diseases, in science or language, by distinctive and significant words, is of the greatest importance. Dentists, physicians, lawyers, authors and clergymen even, would be completely at sea without expressive words and names in their respective professions. Consequently the character, expressiveness and aptness of the terms used in a science are an index to the stage of development or state of perfection which it has reached. Our dental nomenclature has vastly improved within the last few years. Latin is the language used in the nomenclature of the natural sciences. Latin and Greek are both represented in dental and medical nomenclature. The latter word is derived from nomen a name, and calare to call, both Latin words, and literally signifies to call by name.

Symposium, the name employed by the Stomatologist to signify a series of papers, originally means a feast. The Greeks employed it to designate an intellectual feast as well as a banquet. The modern acceptation of the term is "Brief essays or articles upon the same subject by different writers." The sessions were devoted to a "Symposium on Dental Education" and a "Symposium on Interstitial Gingivitis or so-called Pyorrhea Alveolaris."

The new name for pyorrhea alveolaris is derived from the Latin words *gingiva* the gum, *inter* between, *sto* to stand. The terminal *itis* denotes inflammation and the etymology is descriptive of the incipient disease; inflamed gum standing between the teeth. The name is unsatisfactory simply because it is descriptive of a stage of the disease.

Pyorrhea alveolaris is more expressive because it indicates the destructive nature of the malady. Alveolaris is derived from the Latin diminutive *alveolus*, a little hollow, or the socket of a tooth, and pyorrhea from Greek words signifying a flow of pus.

The term pyorrhea alveolaris is objectionable because it expresses too much. It may be applied with equal reason to any pus discharge, even alveolar abscess, and in that respect the name is not distinctive enough to meet the characteristics of the disease.

Personnel. In summing up conclusions we should bear in mind the character and achievements of the men composing the Section of Stomatology of the A. M. A. No one is able to forecast the effect of their teachings on the dentist of the future. They have every agency at their command by

which they can dominate over the Twentieth Century dentist, and mould public opinion as well. Namely, the universities, the colleges, scientific medical and dental societies and journals, text books, the lecture platform and office practice. What will be the ultimate effect of their teachings?

It is only necessary to mention the names and you know the reputation of the men. Litch, the author of the American System of Dentistry, who besides his literary ability is a remarkable mechanical and operative dentist. Bogue, whose crown and bridge work and gold fillings few can equal, no one surpass. M. H. Cryer, a dentist, whose practical demonstrations in anatomy and surgery have earned for him the Professor's chair of Oral Surgery in the University of Pennsylvania. Cryer exhibited at Atlantic City anatomical sections sawed by him from the human skull showing that nasal fossae sometimes contained four and even five meata, instead of three. A fact not mentioned in Gray's anatomy.

E. S. Talbot, Secretary of the Section, has recently published a book on "Insterstitial Gingivitis." His works on "Degeneracy" and other scientific topics may be familiar to you. John S. Marshall, author of an Oral Surgery which is a standard text book throughout the West was present. We might go on enumerating the other stomatologists and their achievements but enough has been said to prove that they are among the most influential men in the dental profession and their opinions will sway Legislatures and even Congress in regard to dental legislation. Therefore a deeper significance can be attached to the proposition made by Wm. Ernest Walker of Mississippi to make the degree S.D., Stomatologiae Doctor, Doctor of Stomatology, and requiring original and meritorious scientific work as well as a four years' course in medicine with the title of M.D. requisites for the practice of dentistry.

The bill before Congress during its last session requiring the Government of the United States to appoint dentists for the Army and Navy was prepared and is being pushed through by the stomatologists. It is to be hoped that the next Congress will not be so dilatory as the one recently adjourned, but that suffering sailors out at sea, beyond the reach of dental succor, may have dentists on shipboard to attend to their needs, before another year passes away. And that the sturdy American soldier may have a dentist accompanying his regiment in the West Indies, the Philippine Islands and elsewhere, who may be called upon in time of dental suffering to treat the mouth and teeth.

At the risk of repetition, permit me to recapitulate the echoes from the A. M. A.

First, the twentieth century opens with a promise of a new dentistry and a new kind of dentist. Second, the scope of the dentist's work is broadening. Third, a medical as well as a dental education is desirable. Fourth, the degree proposed for the new dentist is S.D., Doctor of Stomatology. Fifth, no one knows positively where the practice of dentistry ends and the practice of medicine begins. Sixth, the new dentistry is more positive and exact in details. Seventh, the commercial spirit is condemned. Eighth, nothing new of practical value has recently been announced in regard to the causes and treatment of insterstitial gingivitis. Ninth, interstitial gingivitis or pyorrhea alveolaris is the most formidable disease which the dentist must treat. Tenth, syphilitic gingivitis is diagnosed by a characteristic lesion in the vicinity of the third molar tooth. Eleventh, in scaling calculus, the draw cut is advocated. Twelfth, the new dentifrice is composed of vegetable instead of mineral ingredients. Thirteenth, personnel of Stomatologists. Fourteenth, dentists should be appointed for the United States Army and Navy.

In conclusion a visit to the Section of Stomatology will convince you that the practicing dentist must become an active member of a dental society if he wishes to render to the public intelligent and valuable services, and keep abreast of the times.

Dental Education.

(Continued from page 527.)

H. W. Rogers.

I was interested in what Dr. Taft said in reference to the necessity of the student having a love for his profession. It is important that every man going into any profession, whether dentistry, medicine, law or theology, should be in love with his profession and he should not enter with a view of making money; yet I am sorry to say that there are as many men entering their profession for the sake of making money as there are those who enter for the love of the work alone.

I remember when I was Dean of the Law School at Ann Arbor, I received a letter from a man out West, in which he propounded to me the question whether he could make more money in law, in medicine or in the ministry. I saw his idea, and it is the same as that of many men who enter into the professions. It was said here to-night by one of the gentlemen who spoke that it is true of most of the men who graduate from the dental school that, after they get out they stop studying. That may be said of all our students who come out of the professional schools or the universities. They all stop studying. You take a man who has spent four years in a university, he knows Latin, French and Greek and German. He graduates and immediately enters upon the activities of a business life perhaps, and he naturally stops studying. It is a notorious fact that there is not one college graduate in a hundred who, after he has been out of college ten years, could read a line of Greek. It has all passed entirely out of his mind. It is said that after a man has been admitted to the bar, he never becomes a good lawyer. He must be one before he gets there. After he is admitted he does not study scientifically, but devotes all his time to the practical side of the cases entrusted to him.

Private Dental Schools Condemned.

I think Dr. Taft has very largely expressed my opinion on the questions that have been discussed here, but before I come to them I want to discuss two or three other points that have not been mentioned, and which directly concern the dental as well as the other professions. It concerns the education of men for professional life. I think it is one of the curses of this country, and it is one of the most serious things with which we have to contend in America in the way of mastering a thorough education that the law of the United States practically leaves us helpless by allowing anybody, without any reference whatever to his qualification and without any reference to the actual necessity

for the particular school which he proposes to establish, to establish a school of law, or of medicine or dentistry. There is no power to check this state of affairs, and we have commercial schools established, not for imparting a thorough education, but to make money. Unfortunately these schools are multiplying rapidly, and there is no necessity for their multiplication. We have any number of these schools here in the city of Chicago, and the effect of these schools upon medical education is an unfortunate one. The tendency is to bring down the standards instead of attempting to elevate them. The struggle is for students. The aim is to get as many students as possible, because the more students they can get the more money will go into the pockets of the organizers of the institution. That is extremely discouraging, and the trend is in the wrong direction. If there are two or three good dental schools in the city of Chicago, or elsewhere, why form others, or why permit others to come in simply with the view of making money for the gentlemen who desire to establish them? There ought to be a power somewhere to prevent that sort of thing.

In Europe it is prevented. In order to establish a school you must get a charter from the Minister of Education; you must get permission to start a school, and unless you can convince the Minister that the school is needed you cannot possibly establish it. Your Association of Dental Faculties, in my judgment, should put its hand heavily upon any tendency to establish schools where they are not needed, and where the sole purpose of establishing them is to make money. Their tendency is to decry the other schools who are doing good work and who are always endeavoring to elevate their standard.

Another thing I should like to say. I think, gentlemen, that it is all wrong to license students in dentistry, in law, in medicine or in pharmacy upon a diploma. I never in the world would do it. For quite a number of years in this state a man graduating from a law school presented his diploma to the Supreme Court and was licensed as an attorney. There are schools of law in this city which are existing for the mere purpose of making money for the men who are teaching in them. The idea of men teaching for money is degrading to the very men they teach. The instruction is not half as good as it would be if the men who are conducting these schools knew that the men they are sending out under their seal will be compelled to pass an examination in order to practice their profession. It is all wrong. Your profession would stand higher. It applies to the dental and medical as well as to the legal profession. It has been changed as far as the law student is concerned, but not in regard to the others. Further than that, I believe that it would be better for professional education in this country if every professional school had a connection with a

university. I do not mean a nominal connection, but one that is absolute, one which enables the university to control the school. The curse of education in this country is the spirit of commercialism. If the university can control the school, they can kill that spirit.

High School Education Pre-requisite.

I want to emphasize what was said by Dr. Taft and others. I believe that one of the fundamental difficulties is that students are admitted into our professional schools, into the dental, medical, law and pharmacy schools without any adequate preparation. If the student when he comes into a professional school has not already learned how to study there is absolutely no use in admitting him, for he will then never learn it. To admit a man into a professional school who has not graduated from a high school or who has not had the equivalent of a high school education, is to do him and the school and the profession a very grave injury. There are some men in this country who profess to believe that no man should be admitted into a law school or a medical school or a dental school unless he has had a college education. I do not believe in that spirit at all. I do not believe that a college education is a necessity for the man who is going into the professions. I remember an address, I think it was delivered at Johns Hopkins University about 1876 by Mr. Huxley, in which he said that a man who was thoroughly drilled in the primary branches, who had a thorough knowledge of English literature, a thorough knowledge of history, of biology and of physics, and some knowledge of political economy, who had, in other words, a high school education, that that man had his faculties and his powers sufficiently developed to enter any one of the learned professions. That that man, by applying himself earnestly to his work, will achieve success is, I believe, true. I believe that it would be a misfortune for this country if all our medical, dental and law schools would do what was done at the Johns Hopkins and Harvard Schools, to require that a man must be a college graduate before he can enter the institution. If a man is a graduate of the high school, spends four years in the college, and then four more in the professional school, that man may be a good deal of a man. In fact, he thinks he is so much of a man that he would not want to go to the country towns to practice; he must be in a big city, or rather he thinks he must be. What are you going to do? You cannot find the college graduate, who after he has graduated from a professional college, is willing to confine himself in a small country town of perhaps 1,500 inhabitants, to practice medicine or law. Do not misunderstand me, for I do not mean to say that a man is not more of a man, after going through the university, but I would not like to have every man go through the university, as not every man who has done so has reached the highest

eminence in his profession. A university cannot make a man if he has not the brains, but he is a better man for going through.

Every dental, law and medical school should insist that a man, in order to be admitted into their respective schools, should have a high school education. I would not be satisfied, as your Association of Dental Faculties is, to have two years of high school, but four years, so that he shall have developed his powers and faculties and know how to study.

The high school and the university must develop a man's faculties and powers; the professional school must teach him his life's work, develop him in his profession, teach him law, medicine or dentistry. Supposing that man has had a four years' high school course, what are you going to do with him. There is a practical and a theoretical question there. I do not believe it is practical to insist that a man should have a medical education before he can be a dentist. I do not believe it is practical to run a school on any such basis. The medical profession will certainly not stand it. It has been tried twice in this city to my knowledge, and it has failed twice.

We must take facts as we find them. We may talk of advance in standards, and claim that the best students come to the schools of the highest standards, but that is not always the case. If it were true, why, then, do those schools that break down, break down so lamentably. We tried in our law school in this city. The Supreme Court recently established a rule that the law student must study three years before he can come up for examination. Shortly before that our law school lengthened the course from two to three years. What was the result? The result was that we lost five thousand dollars a year by that proceeding. We were willing to do it. We did not like to do it, but we did it because we thought that the respect for what ought to be done required us to do it. We must not, however, rely too much upon the assumption that students are going to the very best schools as a rule. Students, no matter whether in law, medicine, or dentistry, are usually anxious to get into their professions as soon as possible, and they are going to enter it by the shortest route. If there is a school in the city that has a two years' course and is recognized they are going there.

As to the theoretical part, that is another question. I do not feel about it as you gentlemen do, but it does seem to me that the profession of dentistry is a distinctive profession, and that all the training that the medical student has, a dental student does not need to have. At the same time I think our dental education at the present time is rather defective. I do not believe that too much attention is paid to the mechanics, and I would not decrease the time and attention that is given to that subject. I think it is very important and ought to be continued. I think that there

is not enough attention paid to the scientific branches, and instead of decreasing the time paid to mechanics I would increase the term and would add a fourth year to the dental course, paying more attention to the study of dental education.

I think I have said all that I ought to say upon this subject, as you gentlemen know a great deal more about it than I do. I am very glad that you did me the honor to invite me to come here, as I have learned much from what I have heard. It was with a good deal of modesty that I expressed my opinion on the last phase of the subject, but on the others I am pretty clear.

Dr. Jonathan Taft. At the last meeting of the Faculties Association in New York a resolution was offered and unanimously adopted that a committee of three or five be appointed, the object of which was to govern the establishment of new schools. All persons desiring to start new colleges were to apply to this committee. Every college in the country regarded it as an important matter that they should have membership in the college association. Many of the states have boards of examiners, some of them examine even graduates. This committee was to take this into consideration, and all parties desiring a new institution were to consult with the committee. The committee was to ascertain whether there was need for the college in the place, and whether there was promise of sufficient financial support to make a respectable institution, and to keep it as it ought to be. They were also to take into account the ability of the men who were to enter such an institution, that they were men capable of teaching. If there was no reasonable ground for success, or no reason for founding the school, it should be discouraged by the committee, and they would not recommend their admission into the college association. I do not know of a single instance where a college was attempted to be founded on account of this step. The committee controls this matter in a very large measure. Many institutions have been organized and admitted into the Faculty Association that would never have been admitted except for a regulation of this kind.

Dr. John Marshall. It seems to me that if the dental schools that are connected with the university and with the better class of medical schools would combine on the proposition made by Dr. Taft they would have entire command of the whole situation. They could force the other colleges up to their position and I hope that at the next meeting of the Faculties Association there will be enough of them to take that stand. I do not believe that it has been shown by experience that with an advance in the requirements there has been a falling off in numbers. I think it is just the other way. The schools that have had the backbone to raise their requirements have gained

by it. They may have lost in numbers during the first year, but during the second year they gained.

Dr. Taft. I think you will remember that when the dental schools were organized in Ann Arbor, we had two years of six months each. We soon lengthened that course to nine months, and the regents seemed very doubtful about it. They feared that we would lose in attendance. The step was taken and a larger number of students came in all the time. When we finally decided to lengthen our course there was an almost positive refusal on the part of the regents, but we begged and they finally permitted it. And still the attendance increased all the time.

Dr. Baldwin. It seems to me that it is a mistake to claim that support is given to the lowest requirements. We know that our medical colleges in this city have advanced their standing and requirements very much in the last year or two. I know that in Rush Medical College they have advanced their requirements very greatly in the last five years, and at every advance they have had an increase in numbers. This is also true of the College of Physicians and Surgeons. Only a day or two ago I noticed a statement of their attendance, and it has markedly increased. I know one school here, the dental school connected with the Northwestern University, whose attendance is considerably larger since they have raised their requirements. Our brother dentists down through the country do not supply colleges with students very much. On the contrary, there are very few students who come after consulting with other dentists.

Dr. Rogers. Rush Medical College for years had the largest attendance of any school in this city, and I would say that that attendance has not been due to their high standard. I want to say that while our medical school on the south side was at least one year in advance of Rush in requirements for admission, and the remark I am about to make is true, that where a student was not sure that he would graduate at our school, he went to Rush and was gladly received and was also graduated. I am saying this on the authority of men who stand high in authority in this city. If this is not true, I am willing to stand corrected.

Dr. Baldwin. I want to say right here that Rush College has increased her requirements recently, and in the last five years has increased them nearly every year, and certainly stands for increase. Dr. Evans can tell you, I believe, that the College of Physicians and Surgeons has increased her requirements greatly in the last few years, and I believe that I am in bounds when I say their support has increased proportionately.

Dr. Rogers. There is not a medical school in Chicago that has spent as much money in advertising, and wisely, too, as the College of Physicians and Surgeons. I believe that their increased attendance is due to just that one thing.

Dr. Baldwin. Then why should not the Chicago Medical College do the same thing?

Dr. Rogers. Because, they have all the students they want.

Dr. Baldwin. I never saw a school that did not want students if they can only get the right kind, and I do not suppose that the Northwestern has a monopoly of them. I do not like to hear Dr. Rogers say before this gathering, or any other, that the black ones from his school go over to Rush in order to graduate.

Dr. Rogers. I have been informed that that was done, although I would not make any positive statement myself.

Dr. Baldwin. I think it is ill-advised to say that there is, and will be, an unusual falling off with higher requirements. I cited this instance without making any invidious remarks. It is a fact that as Rush increased their requirements the students increased in numbers, and it was a surprise to them. Some other schools have attempted it, and have not succeeded, but that is not a criterion in other cases. I hope that our council here tonight may result in getting a clearer idea of what may be and ought to be done in the future in the professional educational schools, and I want right here to offer a resolution.

Resolved, That we join in the recommendation that an advanced standing should be taken in educational matters in our branch of the profession, and that a committee of five be appointed, of which our chairman be chairman, to report to the Stomatological Section at the American Medical Association meeting in June next, and at the meeting of the National Dental Association in July.

Dr. John Marshall. I believe it is a fact with regard to the Northwestern Medical School that every time it has taken a step in advance it has gained more students.

Dr. Rogers. No sir. It may have been true in some instances, but it does not necessarily follow that it is true in all cases.

Dr. Baldwin. During my connection with the Chicago Medical College movements were made which in faculty meetings were thoroughly discussed, but were finally followed out, and the number of students was increased. I believe that in most of the schools that did so it increased the record. The school I grad-

uated from was the first school in America to have a three years' graded course of nine months each. Harvard had the three year graded course of six months, and the Chicago Medical had the same. When they adopted the nine month's course they were afraid at first that the number of students would drop off. The result was that it was increased, and they had more men come into the institution who were graduates from literary colleges. Three-fourths of the matriculates were college graduates, and I think that will hold good in medicine and dentistry. Every step of that kind, that you may take, will give you a better class of students and more of them.

Dr. Menges. In my first remarks I simply replied to that paper of Dr. Davis. I attacked the position that he assumed, stating that it was unsound. Any dental institution that attempted to carry out the plans laid down by the doctor would meet with failure. The other question has been pretty well discussed. There is absolutely no doubt that it takes a long time to make a scientific dentist, much longer than it takes to make a scientific doctor. As stated by Dr. Crouse, the doctor can guess at his remedy; he can give his bread pill and sugar water and still have his patient recover. When the dentist inserts the filling, when he applies the bridge or inserts a plate there must be an absolute attachment or the patient will want his money back. I say this, and there is no intelligent man in the world who will question the position who will try to deny that it takes more time and more training to make a thorough dentist from the same material than it takes to make a scientific physician.

It is the same in medicine as in dentistry, and I think dentistry is a little farther in the rear than medicine. We have been attempting to take men, who could not write three consecutive sentences correctly, and give them a scientific training. You can give all the training in the world to that student, and it will do no good. That degree of training, of mental discipline that is involved in completing a high school course of study, is an absolute essential, for the attainment of professional training, be it in dentistry, medicine, law or the ministry. I was talking to one of my friends at the college banquet recently, and I asked him what would he take up. He said medicine, because two-thirds of the students that come into the college study ministry until about the time they get to their senior year, when they find that they are drifting into something else. It is a difficult thing to get a sufficient number of Biblical students to enter the profession of medicine.

With that proper foundation which we have secured from the graduate of the high school we want a certain basal discipline, and I say that in chemistry and in histology, the two scientific gateways both in dentistry

and in medicine, after the first term the paths diverge. The dentist cannot advantageously take the same course that the medical man does after his first year, neither can the medical man judiciously take the same course as the dental man after his first year. I believe that four years is too short a time. I know full well that three years is absolutely too short a time to make a dentist out of the raw material that presents itself at the various dental schools.

As to the question about qualification, I trust the gentlemen will give the managers of schools credit for having a little horse sense, as they are shrewd fellows. A little calculation in arithmetic will show you that you are mistaken. The majority of men in this country have nothing but a common school education, a certain per cent have a grammar school education, and another per cent a very small one, have a high school education. Whenever you come to that class you apply to not one-quarter of the men that you do in the grammar school class. If you think that is a wrong position, you are mistaken. Whenever you select from the smaller number, you cannot select the same number of men. It results in limiting the number who enter the professions as it ought to be limited, and it makes the weaker schools go to the wall, as they ought to. Ann Arbor has increased its course. Before they did so they had 380 students. When they moved to a broader line they dropped off, and when they came to the high school requirement they dropped off to 150. Today they have only 209. In New York, where the education is of a higher grade than in the West, it is absolutely essential that we move cautiously and judiciously if we wish to carry our points. Whenever we come to these higher standards, we have two objects in view. First, to graduate men who are qualified to do good service, and to limit that number as they should be.

Dr. Evans. I have been asked to say something relative to the reason for the increase in the number of students at the College of Physicians and Surgeons. I do not believe that that increase is due to the increase in requirements. The list of students as printed goes back to 1896, when they had 235. In 1896-97 they had 308; in 1897-98, 408; in 1898-99, 515, and during the present season they have about 550 students. The school went to its four-year basis in 1896, and there was a material loss. The school went to its three-year basis in 1891 and there was a loss of students.

The rise has been due to several reasons. The chief and most considerable factor has been the university connection at the end of 1896. There was an effort at uniting the school with the university, which was unsuccessful. That promised so much success that the prosepectus was gotten out setting forth an early union with the university, and as a re-

sult we had 308 students. The union was consummated in 1897, and as the result of that we have 408 students. I do not believe that the increase in requirements has been responsible for the number of students.

The increase in the number of students in Rush has not been due to the increase in the entrance requirements; I believe it was due to the university connection, which may have excited the interest on the part of the alumni of Rush which was partly responsible for the increase in the student body.

It seems to me that Dr. Menges is approximately correct. The situation is a complicated one. You can only advance your standards as far as the people are advanced. That man can advance his standards to the best purpose who can most accurately feel the pulse of the people, and can give to them just that degree of advancement, that rigidity of requirement that the people are ready for at that particular time. I requires an accurate summing up of the situation, not only from the standpoint of the temple college, but from the standpoint of the people at large and of the dental profession. I believe that a large school can always be the best school because money is required in order to secure the best men, and money is required in order to secure the best means of instruction. I do not mean to say that a large school is the best school. My statement is that a large school can always be the best school provided it makes proper use of those larger energies that are distinctive of it by reason of her larger student body.

There are several points which have been brought out during the course of the discussion on which I would like to say a word or two. First, to correct a mistake on the part of President Rogers: I want to say that a diploma is not recognized in the State of Illinois at the present time. The state law reads in one place that the State Board of Health shall excuse the schools of Illinois. In another place the law reads that the State Board of Health may excuse a school. Almost immediately the large medical colleges of this city drafted resolutions asking the State Board of Health not to excuse their students from examination. The State Board of Health at its next meeting passed a resolution that no Illinois students or graduate would be excused from the examination. The case has not come to the courts, but I believe that the Attorney General has ruled that the State Board of Health can require an examination. A student may test that, and the court must then determine whether the word "may" is the one under which the State Board of Health must operate. The law is whether John Jones shall or shall not practice on the people of the State of Illinois, and that has absolutely nothing to do with the preparation of John Jones. They are two conditions that are absolutely separate. A diploma has absolutely nothing whatever to do with

the other condition. The State Board of Health represents the people, and it is their business to say whether John Jones shall or shall not practice medicine or dentistry in the State of Illinois.

As to the matter of a college education, as to the preliminary requirements, I believe that I am in accord with President Rogers on that point. I have noticed a lack of enthusiasm, of earnestness, on the part of Johns Hopkins students. The Johns Hopkins student appears to be a flashy individual, and I do not believe that the Johns Hopkins doctor is the doctor needed by the American people. I believe that there is a small field here and there that needs Johns Hopkins students, but throughout the country at large there is no need for them. I had a talk with President Adams, of the University of Wisconsin, along this line some two years ago. It was his opinion that the University of Wisconsin should have a medical school founded upon the Johns Hopkins lines. I said on that occasion that the people of Wisconsin did not need a medical school along those lines; they did not need doctors along those lines. In your profession, as well as in mine, we must bear in mind that there are two sets of requirements. There is a need for a limited number of men of broad education who must serve as leaders in their profession. There is a greater need for the men who do the average work for the average people, and these are the most necessary men for the community as they are found.

A Question of Pedagogics.

A statement was made that it was not advisable for the student to carry six or eight studies simultaneously. I believe that it is a good thing for a man to finish a few things up before he takes up some more. I do not believe that that is good pedagogics, that it is the proper method of teaching. When the student enters the dental school he should have some practical work the very first day, and throughout his course in that dental school he must have the dental bearings of his anatomy, bacteriology, physiology, chemistry and everything that he studies kept constantly before his mind. I do not believe in the idea which I know is being advocated all around by Professor Taft here and other able men elsewhere, that it is a proper pedagogic principle to take up one thing, finish it up and then put it down and take another thing up. I believe that the proper pedagogic principle is to combine all these things.

A student said to me the other day, "I have studied medicine in this school for two years, studied hard, and I do not see that what I have been studying has anything to do with medicine. I do not see where it comes in to being a doctor, looking at people's tongues and feeling their pulse." I may say that this student was the honor man of his class. I mention this illustration, taken from the teaching of my own profession, because I know that it is a fact that for two years in a medical course there is a

minimum amount of effort towards helping to make a man who is to attend the sick. There is a minimum amount of effort toward directing the attention of the student to the principal fact that he is studying in order to help a sick man get out of bed. It is wrong, radically wrong. That man as a freshman should have placed before his mind the idea that he is there for the purpose of being a doctor, and that his physiology means that he is to be a better doctor; that his chemistry means something along the line of medicine; his anatomy means something along the line of surgery. He should pick up medicine as a fourth or third year study, and the cardinal branches—medicine, surgery and obstetrics—should be given him in some kind of form or shape every day that he is in school. Perhaps he forgets it all. Perhaps the medicine learned in his first year may mean nothing to him. Let him forget every single fact, and yet you have accomplished your purpose. You have kept before this man's mind the idea that he is to be a doctor.

The same applies to dentistry. You should not have the first year set aside for things that have not a close relation with dentistry. The first day the man enters school he should have rammed home the idea that he is to be a dentist and it should not be allowed to get away from him.

As to preliminary training every one seems to have agreed that there is a great necessity for preliminary training. I agree with you thoroughly on this point, but I want to say do not be disappointed if you do not receive as great a return from this as you expect. You may get something, but do not let that be an excuse for relaxing your efforts? What is training? The belief in the grammar school is that the student should be taught a certain number of facts. We know that in the majority of the high schools the amount of training is not much in excess of that which I have cited. In many of the colleges not much gain is had at the point I have indicated. The training that the dentist needs is not a training of his memory, for ever since he began to study there has been a constant effort to train his memory. The training he needs is the training of his powers to understand, to reason and to judge. You cannot train a grammar school student how to reason or judge because his reasoning at that time is comparatively limited; he is not capable of comprehensive reasoning nor of exercising his judgment. You can do a little but not everything. We know that in the high schools they make some effort at training students how to observe. The effort is an insufficient one. You will find that when you get students from the second year of high school or even the last, there will yet remain for you an arduous task in teaching this man how to see things, how to reason, how to analyze the existing condition and the causes which underlie these conditions.

We have talked a good deal about the fact that the dental student stops growing. Dr. Rogers has called our attention to the fact that the student generally stops growing. What he has said does not apply with full force to the dental profession. The average man who goes through college gets his A. B. and goes into business. The tool of the dentist is his mind; it is his stock of information and therefore, when he stops studying he stops adding to the number of tools to be found within his tool chest. It is a fact that a doctor in a great majority of instances ceases study, but that does not excuse you from seriously considering the fact that the majority of dentists cease studying. I believe that the number of dentists who cease studying after graduation is larger than the number of doctors who fail to study after graduating. That does not concern you, however, as you are here not to trouble yourselves with the ills of medical education which I believe are more violent, more potent, and more urgent than the ills which concern the dental educator. Your problems are as nothing compared with their problems, but we are here to talk about your problems.

I believe it to be a fact that the men who apply for positions in the dental profession are scarcely as good as the men who apply for positions in the medical profession. As Dr. Crouse has said, the reason we do not get better men is because we do not turn out better men. When the teachers in your schools are recognized as men of learning and of science, then the better class of men will knock at the doors of the dental colleges for admission, but not until then. The obligation is urgently upon you to get the very best class of men that you possibly can get, to raise your entrance requirements just as high as they can be raised without material loss in your student bodies. I tell you that if you suffer material loss in the number of your student bodies, you will suffer materially in your potency for good or for evil. Then, if you elevate your requirements as much as they can possibly be elevated, you will then have to take into your schools the very best teachers and men of recognized ability that you can possibly procure. You have got to instil into your men the spirit which will keep them working through your curriculum and will make them desire to be bigger and broader men after the college course has been ended.

I do not know what to say in conclusion, other than that I have learned a great deal from being with you this evening. This meeting has been excellent in one thing, not only in what you have learned, but it has brought together a number of men with diverse interests, sometimes with antagonistic interests. You have spent an evening in discussing dental education. The question of competition between various schools has scarcely been heard of. The question of antagonism between

educational bodies has scarcely been dwelt on at all. Your question has been "how can you elevate the dental profession and how can you elevate the dentist." I think we all ought to thank the chairman of the evening for bringing us together for this purpose and we will thank him if he will bring us together at some future time for the further consideration of this and similar subjects.

Dr. E. S. Talbot. Before adjourning the meeting I wish to say just one word in defence of what Dr. Davis has said in his letter. I have been very much pleased with all the remarks of the various speakers. The ideas of Dr. Davis he formulated as early as 1868 and they were intended to be merely the skeleton upon which to build a structure. He had no idea of formulating a specific plan upon which to base dental education, but he wanted to lay down a plan upon which to work and he has certainly succeeded in doing so.

In regard to remarks made by Dr. Menges, I think we will all agree with him, but he has taken only one side; he has forgotten that there is a dental pathology. The time has come when the dentist must do more than fill teeth. I do want to see, what has not been brought up tonight, that dental pathology be taught in our dental schools and from a broad standpoint. The graduates of dental schools, and those in practice today, know nothing about the pathology of pyorrhea, or the etiology of irregularities of the teeth. It is not taught and until we do have a broad medical education, until the student is educated on a broad basis, not until then, will they know anything about pathology. It is only necessary to run over the literature in the dental journals of the past year to show the ignorance of the dental profession in this respect. My idea in opening this discussion this evening and saying that I agree with Dr. Davis, was that I wished to have it brought out that dental teaching is on very narrow lines. The dentist of today thinks he has nothing to do but fill teeth; he does not know anything about pathology unless he was taught pathology in the medical school; he knows nothing about comparative pathology or comparative anatomy. He knows nothing of that other important side of dentistry, the pathology of all the conditions of the mouth. I hope that by extending the dental course to four years, nine months in each year, as has been talked of tonight, all these deficiencies will be altogether, or at least in a measure, remedied.

I am very much obliged to you all for your presence here this evening, and I am sure that we will all profit by what has been said on the subject of dental education.

Central Dental Society of Northern New Jersey.

Discussion of Dr. Gregory's Paper.

Dr. J. Allen Osmun. I have performed the operation delineated by Dr. Gregory and have found it most efficacious, but I doubt whether there will be union. However, it is worth the trial and no one can tell what the result will be until the effort is made. What can be done with fractured roots, with a little care, is simply marvelous, and the system of the screw and the nut gives wonderful power in bringing broken fragments together. I have had some cases where I have had fractured teeth and brought them together where the crown was badly fractured, and have applied artificial crowns, some gold, some gold and porcelain combined, and some porcelain crowns, and they have done excellent service for many years.

Dr. C. W. F. Holbrook. I have had some experience in this direction, although not a great deal and I regret to say that my experience has not been very successful. I do not wish to throw any cold water on Dr. Gregory's successful operations, but I would rather remove the teeth after they became badly fractured, and that has been my practice. Still I think the plan and the principle are both very good, and if such a case comes to my office I shall certainly try Dr. Gregory's method.

Dr. Mitchell. I have had no personal experience in this class of cases, but last Summer a boy of one of my patients had a tooth that was injured while playing ball at Syracuse and the doctor there diagnosed a transverse fracture and said he would try to get it to unite. Whether it was such or not I do not know. When he came to me about two months afterwards to take off the gold splint, I spoke to my friend Dr. Fish about it, and he said, "leave it on a little longer." I left it on for a month longer and then took it off and the tooth was slightly loose then; then I put it on and left it on for a third month and it was tight. Whether that was a

transverse fracture or not, I don't know, but if it was, something tightened it up and it has been in good condition for two or three years.

Dr. N. M. Chitterling. I am on record as approving this proceedure, by the paper I read last Summer, although my operation was not performed with screws. However, I am heartily in favor of any operation that will save fractured roots, and I know it can be done, because I have had a number of cases where the roots were badly fratured and there were some perforations from decay and I bound them together by bands placed under the edge of the gum; in almost every instance they have done splendidly.

It seems to me that the screw idea is rather superior to bands; it will not give the appearance of a large gold filling and I do not see why it should not do better work than bands.

Dr. Charles A. Meeker. I would like to ask Dr. Holbrook if the tooth he had fractured is all right?

Dr. Holbrook. I had in my mouth a left superior twelfth year molar that was fractured about four years ago: I tied it together with silk ligature, took an impression of it and made a crown. Dr. Meeker put the crown on—it nearly killed me at the time, but I lived through it. (Laughter.) That crown did good service there for over two years. It is off now because the tooth became inflamed and the tooth is doing good service without a crown and without screws. (Laughter.) That is one of the few cases with which I have had experience as being successful. (Renewed laughter.)

Dr. Fred C. Barlow. I have never had any experience in bolting teeth, but I have had a little in ringing or putting a collar on fractured teeth. I have one here which after I banded it was worn for over nine years. (Exhibited tooth.) I took it out about a year ago.

Dr. Chitterling. I would like to tell of a case of Dr. Barlow's, that I saw some time ago. It was a case where the inner cusp of a second upper bicuspid was broken off away below the gum and the lady told me that at least eight years before Dr. Barlow had placed an amalgam filling there which was then in place. It was the most beautiful amalgam filling I ever saw in my life. (Applause.) And at the end of nine years it was doing as good service as if it had been put in the day before; three-quarters of the tooth was amalgam.

Dr. C. Alfred Hane. I have had some little experience with fractured teeth and I find that the operation which Dr. Gregory speaks of is successful in most instances where the fracture does not extend too far up into the

root. In most cases of fractured teeth they have been devitalized; it is very seldom a live tooth will fracture unless caused by a very severe accident, and as long as the fracture does not extend too far below the gums, I think the operation will be successful, but in cases such as I have seen with the root split almost up to the apex, I have had but very poor results, and, as Dr. Holbrook says, I would prefer to extract in such cases.

Dr. Wm. F. Richards. I do not wish to say anything in opposition to our friend Dr. Gregory. I must say though that I do not agree with him; he is a genial honest fellow and his theory is probably all right in his estimation. I have had a number of those cases, and have made partial successes of them and a great many failures. I do not believe in it at all, I think that extraction is the best and safest way of treating such teeth. I have banded them and screwed them together and held them together with plates and all sorts of things, but I think the best practice is to extract them.

Dr. Wm. H. Pruden. My experience has been that I have extracted such teeth. If they are bicuspids the posterior surface might split off and I think it would be pretty hard to put the pin through. I have usually extracted them, although I might get a favorable tooth and try it and see. But I do not think it would be good for a lasting operation.

Dr. J. W. Fisher. I do not think it is right to say extract teeth because you do not have success with them otherwise. I think there are ofttimes cases where teeth can be saved. There used to be a time when they used to preach "Dead teeth—away with dead teeth." I never say that. I had at one time a very severe preceptor, who required we to try and save any teeth that came in. For several months at a time I have not extracted a tooth, and I believe that too many teeth are extracted. I had a case some time ago of a superior lateral incisor; it was in the mouth of a young man; the fracture had gone nearly to the apex of the root, as far as I could find. At first I thought I was going to have very poor success with it. I opened that tooth on the palatal surface and inserted a gold wire as far up as I could get it. The tooth abscessed; I treated the abscess and got it well. Today that tooth is well, as far as I know. The young man says he has not had a particle of trouble with it, and, as for extracting teeth like that, I think that everything possible should be done before extraction is resorted to.

I have a very unfortunate fracture case at the present time; the young man was riding his bicycle and fell and the jar broke off two corners of a superior left central. He does not want it cut off and a

Richmond crown put on, or any other of the numerous crowns and he does not want it filled with gold, and I have got to devise some means of treating it. Dr. Gregory says it would be very well if I could find the pieces, but I think that would be a difficult job!

Dr. W. E. Truex. I have but little to say on this subject, except that I am thoroughly satisfied in my own mind that very much can be done with fractured teeth, and in various ways. I have in the past resorted to almost every means that have been spoken of here, with a variety of results, some very satisfactory and others not so satisfactory. Success has been due to individual cases where susceptibility to inflammation is very slight. Where the inflammation is of a positive character more or less absorption takes place and the results are not as satisfactory in those cases, as in others, but I have sufficient success in my practice to warrant me in making every possible effort to save fractured teeth.

Dr. Chas. A. Meeker. I have listened to Dr. Gregory's statement with a good deal of pleasure, and I am proud that such a paper was read by one of our own members. I think that what we learned at Atlantic City a few years ago should guide us a good deal in this matter. Dr. Weidelstat showed us by his dynamometer that the average pressure of a tooth in mastication is about thirty-five pounds—I think Dan Jones of New Haven went up to forty-five when he tried it, but you all know what kind of a jaw he has. (Laughter.) Suppose we take the case of a young and vigorous man or woman with a fractured tooth; there if we are successful we preserve the tooth for a number of years and I believe it to be the duty of a dentist to save such a tooth if he can, whether it is by a collar or a screw or other means. Personally I regard the collar as the most scientific method of restoring a fractured tooth. In the case of persons past forty years of age, when the margins of the gums have begun to recede and the alveolus is thinner, we know such teeth will not be in service for a great many years and we should use great judgment in seeking to repair fractures in such cases. When a patient comes to me I take his age, and if it is a young person I tell him that the tooth can be taken out at any time and in the mean time an effort should be made to save it, for later on artificial teeth can be inserted, if necessary.

I am glad that Dr. Gregory is showing an interest in this for he has the enthusiasm of youth and may give us many points yet in after life which may help us along.

Dr. H. S. Sutphen. I never have tried Dr. Gregory's method, but in a number of instances I have resorted to the band and with very gratifying success. I can recall

now a half dozen cases that were banded all the way from a year to five years; they are still under my eye and are successful. About eight years ago I banded a wisdom tooth for a gentleman who was then upwards of sixty years of age; it lasted for three or four years and then because of absolute lack of care on his part pyorrhea set in. Inflammation started in that tooth and I was compelled to extract it; it didn't take very much to bring it out either, and yet those parts were apparently in perfect apposition.

The screw method is undoubtedly in some cases an improvement over the band; at the same time, unless I had a very favorable tooth I would hesitate to adopt the screw device, especially where it was necessary to go a good distance under the gum and go through the alveolar process. I am afraid I would have quite a little trouble before I got success in such a case with that method. But the band method I know has been very successful, and the tooth shown by Dr. Barlow is a very good instance of it.

I placed a band in the mouth of one of my relatives which has been there over six years and he is a man who uses his jaw very powerfully—I guess if Dan Jones can bite forty-five pounds he will bite fifty-five. That is about as severe a case as you would ever get and that is doing perfect service today and apparently is good for many years to come. I think with the member of our executive committee who testified to the effect of extraction, that we should do all we can to keep the teeth comfortable as long as possible, and when they can no longer be kept comfortable by banding or other surgical treatment, they should be extratced, but not until then.

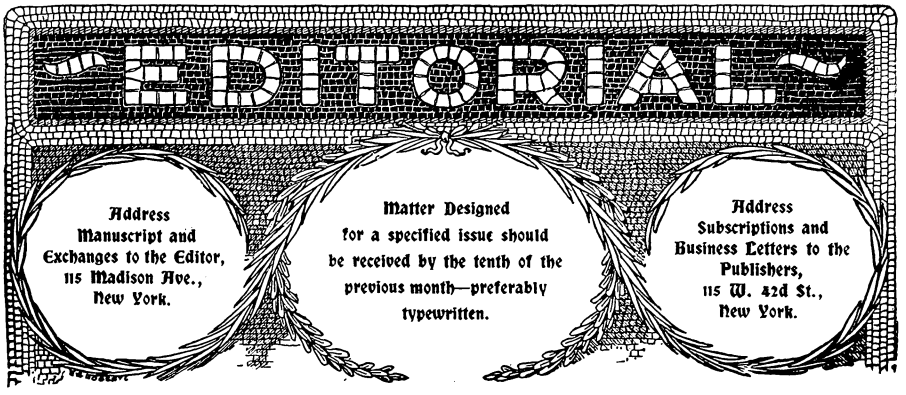
Dr. Gregory.

The special advantage that I have found in the use of gold screws has been in cases where the fracture extended somewhat under the gum. In the use of a gold band there is apt to be a protusion of the free end and a subsequent irritation which is bound in time to cause a loose tooth.

I found that by the judicious use of these screws the part can be brought absolutely together, and held there, and, as I say the special value of the gold screw is underneath the gum margin.

Then too it is not at all unsightly and can be employed wherever a gold band can be.

I have not treated more than twenty-five or thirty teeth by this method, but I must say that in every case I was so exceedingly gratified with the results that I am somewhat enthusiastic over it, and its special value is, as I have said where the exhibition of gold is undesirable.



The Latest From New Jersey.

In an editorial published in October, 1899, we discussed the resignation of the New Jersey State Board of Examiners from the National Association of Dental Examiners. In considering the causes which led up to this resignation, we used the following language:

"But of course there must have been some reason for this resignation. It was rumored at Asbury Park that certain persons did not desire to see Dr. Meeker re-elected to succeed himself as a member of the Dental Commission, yet he not only was elected, but was nominated by the alleged opposition candidate who thus declined to lend himself to the downfall of Dr. Meeker. Now it happens that Dr. Meeker is, and for some years has been the secretary of the National Association of Dental Examiners. Of course, if the New Jersey Commission should resign, Dr. Meeker could no longer be a member or hold office as secretary. Have we found our correlation of facts?"

From events which have since occurred, it would seem easy to answer the above question. As stated in the paragraph quoted, Dr. Meeker was re-elected by the New Jersey State Society to succeed himself as a member of the Board. This was one year ago, and yet on July first Dr. Meeker had not received his commission of appointment from the Governor, notwithstanding the fact, that the New Jersey law on this subject is most specific, giving the Governor no option, the statute being mandatory. It reads, "The New Jersey State Dental Society shall, at each of its annual meetings, recommend to the Governor for appointment, as member of the State Board, a dentist of good repute residing and practicing in this State, *whom the Governor shall appoint.*" (Italics ours.)

Apparently the Governor's action in this matter was to some extent

controlled by the other members of the Board; at least one is led to this deduction by the fact that recently Dr. Meeker was informed by the other members of the Board, that unless he should tender his resignation to them within four days, they would have him removed. Thus, it seems that they consider that they have sufficient influence with the Governor to bring about this result.

The way of accomplishing this seems to arise from the language of the statute, which says that the Governor "may remove a member from office upon proven charges of inefficiency, incompetency, immorality or professional misconduct." The other members of the Board claim that they are in a position to prove that Dr. Meeker is incompetent. However that may be, their recent action in asking for Dr. Meeker's resignation seems to be a full reply to the query of our editorial of a year ago, and that answer is that their main reason in resigning from the National Association of Dental Examiners was not so much in the interest of dental education either in New Jersey or throughout the country, as because they desired to have Dr. Meeker removed from the honorary office of secretary of the National Association of Dental Examiners.

The resignation of the New Jersey Commission, tendered last year, was laid on the table, and Dr. Meeker was re-elected secretary. At the meeting at Old Point Comfort, just ended, the National Association of Dental Examiners once more insisted upon re-electing him as secretary, claiming that this would be a refutation of the charges which had been made against him in his own state. It must also have been very gratifying to Dr. Meeker to receive thirty letters from prominent dentists in New Jersey, asking him to use his influence with the National Association of Dental Examiners, to the end that they should not accept the resignation of the New Jersey Board.

The members of the New Jersey State Board of Dental Examiners seem to have an extraordinary notion of the powers vested in them by the laws of New Jersey. They have represented to the New York Board of Regents that their standards for license are as high as those of New York, and under this representation they have obtained an agreement for interchange of license between the two states.

The requirements in New York state exact that the candidate shall have had preliminary education equivalent to high school graduation. The requirements in New Jersey are that the candidate shall "have re-

ceived a preliminary education equal to that furnished by the common schools of this state (New Jersey)." The New Jersey Board construes this to mean high school graduation, but it is quite evident that such was not the intention of the act, nor is it likely that such a claim by the Board would be upheld by a court, if resisted by an applicant for license. The citizen of a state is not expected to wander from the locality in which he resides, in order to comply with the laws of his state in acquiring a free education. High schools exist in only a few of the large cities of New Jersey, and consequently the residents of other sections could not be expected to move from their homes and pay board in another city, in order to obtain a free education in a high school. Thus the law in requiring common school education, only means the highest education which is common to all localities throughout the state.

Section 3 of the New Jersey statute authorizes the Board to adopt from time to time rules for its own government, in the examination of candidates for licenses to practice dentistry. Judging by some rules recently promulgated, this Board evidently construes this passage to grant them the authority to erect preliminary educational requirements, notwithstanding the fact that these are already specifically set forth in the statute.

It is entirely within the power of the New Jersey Commission to examine candidates as to their knowledge of dentistry, and in this connection they may make their rules as rigid, and their standards as high as they please, but the preliminary education is specified in the statute, and is not within the jurisdiction of the Board; nevertheless, the following paragraph appears in their instructions for applicants, under the caption "Preliminary Educational Requirements."

"For the year 1900 candidates for examination for license to practice dentistry in New Jersey must present certificates showing that they have fully completed a three years' course of study of an accredited high school, or hold other certificates or diplomas which shall be regarded as the equivalent thereof. A 36 count, New York Board of Regents' certificate will be accepted.

"After January 1, 1901, a full four years' high school course, or a certificate or diploma which shall be regarded as the equivalent thereof, will be required. A 48 count, New York Board of Regents' certificate will after said date be accepted.

"Applicants who are unable to present any of the aforesaid creden-

tials will be required to pass a satisfactory examination before a board of examiners appointed by the State Superintendent of Public Instruction, whose certificate of qualification will be accepted."

This rule is interesting, because it establishes the fact that the New Jersey Commission have taken the law into their own hands. If it is the intention of the statute to require high school education where it specifies "education furnished by the common schools of this state," then the Commissioners have no right to examine those who have only been three years at a high school. If they have a right to examine those who have had only three years' of high school training, they have no right to increase the standard; in other words, this is a question of the meaning of the law, and is not within the jurisdiction of the New Jersey Board.

In the editorial from which we have quoted the above, discussing the question as to whether the Commissioners of New Jersey are amenable to the State Society, the following language was used: "A public officer must always be responsible to his constituents, and should give ear to their desires, even though it be true that the constituency cannot actually control his legal acts. Where an official does contrarily, the voter may wait for the next election, etc." It is evident that the voters of the New Jersey State Society took this view of the matter for, after waiting a year, during which they discovered that their commissioners still claimed that they owed no allegiance to the State Society, at their annual meeting in Asbury Park, they elected Dr. J. Allen Osmun to fill the office made vacant by the expiration of the term of one of the commissioners who held this view. They also passed the following resolution:

"Whereas, as all the good effects sought to be accomplished by the State Board of Examiners in offering their resignation to the National Association of Dental Examiners have been accomplished,

"Resolved, That the New Jersey State Dental Society respectfully requests the State Board of Dental Examiners to withdraw their resignation from the National Association of Dental Examiners, and return to their membership in that body, in order that their good influences may be continued in the National dental interests."

The commissioners have one year in which to grant this request of their State Society. Should they refuse, it is conceivable that, at the next annual meeting, a more obedient commissioner will replace the gentleman whose term expires at that time.

Theodore Menges, B.S., A.M., D.D.S.

The sad intelligence of the death of Dr. Theodore Menges, who was taken from our midst in the full prime of life and usefulness, was received by his numerous friends with great sorrow. His illness covered the brief period of one week, and his death, on June 1st, at the Passavant Hospital, came immediately after the second operation, performed by Dr. Fenger for appendicitis. His exhausted condition and low tone of physical vitality were responsible for his sudden collapse; while the shock sustained at the second operation was so pronounced that he never rallied.

Dr. Theodore Menges was born May 2, 1854, on a farm near Bristol, Indiana. He fell heir to the labors which accompany the "farm boy's life," and at the early age finished the common school course. He studiously sought to acquire an education, and his initial ambition was to be a teacher, and at sixteen he taught school in his home district. Eager to rise in his chosen profession, he journeyed to Lebanon, Ohio, and entered the college at this place. Being obliged to meet the expenses of tutorage, he taught during the winter months and attended college in the summer, devoting his spare time to selling standard works to the reading public of that portion of the state. In 1874 he completed the teachers' course at this institution, and subsequently matriculated in the scientific department of the Northern Indiana Normal School, where after two years of diligent study he earned with highest honors the degree of "Bachelor of Sciences." Anxious to become a thoroughly trained pedagogue, he prosecuted a course in the classics at this institution, and in 1878 received the degree of "Master of Arts."

Upon finishing this course he was recommended by Principal H. B. Brown to take up the principalship of the High School at Bloomfield, Indiana. After teaching at this school he organized the Bloomfield Normal School, and among his co-teachers was Miss Alice Brown, a graduate from the Northern Indiana Normal School, and she became his wife in 1880. Dr. Menges continued in the capacity of principal of this normal school for about five years. In his leisure moments he studied medicine, and in 1881 he took the first year's course in the Jefferson College of Medicine at Louisville, Kentucky. The following year found him patiently studying law, and in 1883 he was admitted to the bar, and in the fall of the

year he purchased the law practice of Boys & Shaw, and incorporated the firm of Menges & Stone, which firm continued to do a most prosperous law business until 1886, when Dr. Menges moved West to Kimball, Neb., and five years found him and wife further west among the Rockies. He located at Cheyenne, Wyoming, where he engaged in law, real estate, and mining, and he conducted an exceedingly profitable business. In 1892 he came to Chicago and opened a real estate office, but he did not long continue in this business. Shortly after matriculating in the American College of Dental Surgery, Dr. Menges and Dr. B. J. Cigrand purchased this dental college. Dr. Menges was elected to assume the arduous duties of secretary, and besides looking after the business matters of the school, lectured on chemistry and philosophy. As an evidence of the phenomenal success of the institution, it is only necessary to add that the roster of the school from 1892, with 37 students, was raised to 427 in four years. The success of this great institution, without question, was largely due to the untiring devotion of Dr. Menges. He received the degree of "Doctor of Dental Surgery" in 1893, and from this period on became a great power in dental education.

In 1896 the Northwestern University sought to purchase the American College of Dental Surgery, and Drs. Menges and Cigrand, upon receiving the sum of $50,000, surrendered its charter. The university had a dental department, but upon effecting the consolidation of the two schools, it possessed the largest dental institution in the world. Dr. Menges continued in the capacity of Secretary of the Faculty, and also filled the chair of Professor of Physics.

It was but natural that a man of his prominence should be sought after by various dental organizations, and he was an influential member of the National Dental Society, Columbian Dental Congress, Chicago Dental Club, Chicago Dental Society, the Illinois State Dental Society, the Odontographic Society, the Dental Protective Association, the Psi Omega Greek Letter Society, and kindred dental associations. His high position on the Executive committees of the "National Association of Dental Faculties" will bespeak the value of his good judgment and counsel.

It is true that he died at an early age; still considering that life is made and measured, not by hours, months or years, but by the good accomplished, we would be obliged to say that he lived to a ripe old age. Some men perform a great deal in a short time, and he certainly was of these persons. Indeed, he labored with such constancy that he died a martyr to his duty.

His energy and determination were really Napoleonic, and few lives can better exemplify the saying of Goethe, "Have an honest purpose and then dare to perform it."

He possessed strong convictions, and was ever ready to avow and defend them, and mere opposition added strength to his positive nature. He took the advice of Polonius, "Be slow to enter into dispute, but once in, make your enemy fear you." Yet in this plucky and positive character there ran a vein of liberality seldom found in a person so thoroughly imbued with the love of stability. He always advocated a broad and liberal policy, and was enthusiastic in his plans of managing a purely democratic dental college. He possessed little patience for formalities and still less for anything which evinced aristocratic tendencies. His frank and unassuming manner won for him the respect of all who yearned for a trustworthy friend. He exercised an almost unparalleled influence over student bodies, and his presence before them was sufficient to awaken the most latent enthusiasm and lent inspiration to all present. He possessed a wonderful faculty of communicating knowledge to others, and his many talents fitted him as an educator, and in this latter capacity he was as preeminent as he was successful as a financier. He also possessed the dual talents of an organizer and disciplinarian, and his daily contact with classes spurred the students to continuous and effective efforts, for his encouraging personality was among his striking noble qualities. He was an earnest student, a profound teacher, a devoted husband, a loyal American and Christian. His life clearly exemplifies what comes from the happy influence of a good home and a thorough college training, and adds glory to our form of government, in that he struggled from childhood among adversities, and when at the pinnacle of a pedagogical career, died to receive the crown at the hands of his Redeemer.

These are the mere initials of his greatness as known and admired by his close friend.

B. J. CIGRAND.

Charles W. McCall.

Charles W. McCall, D.D.S., died June 7, 1900, at Binghamton, N. Y., in his fiftieth year.

Dr. McCall was born in Franklin, Delaware county, N. Y., on Aug. 24, 1850. He was a son of the late Dr. S. H. McCall, for many years one of the most prominent dentists of Binghamton and the state of New York.

Dr. Charles W. McCall was most carefully prepared for the practice of his profession, first as a student in his father's office, afterwards in laboratories and offices in New York, graduating from the New York College of Dentistry in the class of 1876. He practiced for a short time

in South Orange, N. J., when he returned to Binghamton to associate himself in practice with his father. After the death of his father he continued the practice, removing it to his own residence at 82 Chenango street, where he maintained one of the most lucrative practices in this part of the state, until his death, which occurred after only one week's illness.

Dr. McCall was one of the most prominent and active members of the Sixth District Dental Society, but so free from selfishness that he much preferred to see its offices in the hands of others rather than his own, but was twice its vice-president, twice its president, and a member of its Board of Censors at the time of his death.

At the celebration of the twenty-fifth anniversary of the Society, he, the son of the first president, was very fitly its presiding officer.

He was a member of the First Presbyterian Church, and prominent in business and social circles in Binghamton.

Since the organization of the Board of Trustees of the Barlow School of Industrial Arts at Binghamton, he was a member of that body, also a popular and prominent member of the Dobson Club, and the Broome County Country Club.

It is difficult to convey to those who did not know him a proper idea of Dr. McCall, genial, unselfish, sympathetic, ready to listen to the joys or sorrows of all who came to him, as his clergyman said: "Sorrowing with those who sorrowed, rejoicing with those who rejoiced." It did seem when you told him of some good fortune that had befallen you, that it gave him more delight than if it were his own; and when grief or misfortune had come to one, he always seemed able to pick out the blessing attendant upon it, and make it to you the most prominent feature.

Fond of languages, he found time from a large practice to pursue their study. Of broad culture and artistic tastes, his home was not only a delight to him, but to all his friends and visitors. Popular as he was in social and club life, and fond of foreign travel, having traveled quite extensively abroad, yet his devotion was to his home, where he had an ideal life with his wife and son, both of whom were his most frequent companions, when the day's work was ended.

Industrious, business-like, yet professionally ethical, always with words of praise for his competitors, dentistry has sustained a loss in his death, his friends and the Sixth District Dental Society of the State of New York an irreparable one.

He was married to Miss Elizabeth Lyon Mandeville, April 7, 1880, and is survived by her and one son, John Oppie McCall, a member of the senior class of Yale College. E. D. D.

National Society Meeting.

International Dental Congress, Paris, France, August 8-14.

State Society Meetings.

Minnesota State Dental Association, Minneapolis, September 5, 6, 7.
Ohio State Dental Society, Columbus, December 4, 5, 6.
West Virginia State Dental Society, August 30, 31.

Local Society Meeting.

First District Dental Society of the State of Illinois, Galesburg, September 28.

Minnesota State Dental Association.

The seventeenth annual meeting of the Minnesota State Dental Association will be held in Minneapolis, Minn., Sept. 5, 6 and 7, 1900. A cordial invitation is extended to all members of the profession in this and other States. One-half fare on all roads to the "Twin Cities" that week.

A good meeting is assured. Come.

H. L. CRUTTENDEN, Sec., Northfield, Minn.

Southern Dental Society of New Jersey.

The June meeting of the Southern Dental Society of New Jersey was held in Masonic Temple Building, Camden, N. J., President Dr. Joseph Duffield occupying the chair.

The Executive Committee recommended that the Society should be incorporated, and the Committee was authorized to have the Society incorporated under the laws of New Jersey.

Dr. C. A. Meeker was elected an honorary member.

Dr. C. P. Tuttle read a paper on "Nitrous Oxide Gas," which was followed by an animated discussion in regard to nitrous oxide gas, its manufacture and administration. Every member present, with the exception of two, participated in the discussion, which speaks highly of the interest taken in the Society and argues well for its future success.

Dr. Alphonso Irwin read a paper entitled, "Echoes of the American Medical Association" (published in this issue).

A special meeting was called, to take place in Atlantic City, August 11.

Drs. Waas, Halsey and Shoemaker were appointed a Committee of Arrangements.

The Society was organized by the dentists practicing in the seven lower counties of the state. It starts with twenty-three members and meets the third Wednesday evening of each month (except July and August) in the Masonic Temple building. The officers are: J. E. Duffield, President; O. E. Peck, Vice-President; A. K. Wood, Recording Secretary; W. W. Crate, Corresponding Secretary; Mary A. Morrison, Treasurer; Executive Committee, A. Irwin, Chairman; J. G. Halsey, C. H. Tuttle, A. B. Dewees, E. E. Bower, J. P. Lummis.

Tennessee Dental Association.

The thirty-third annual meeting of the Tennessee Dental Association was held at Raleigh Inn, near Memphis, Tenn., May 8th, 9th and 10th, 1900, President A. R. Melendy presiding.

The programme was an exceptionally good one and reflected much credit on the committee who had charge of same. Several very interesting papers were read and discussed; the clinics were unusually good. Sixteen new members were added to the roll; three had been removed by death, viz., Dr. W. T. Arrington, of Memphis; Dr. W. D. Taylor, of Brownsville, and Dr. G. S. Pearcy, of Jackson.

The following officers were chosen for the ensuing year: President, W. M. Slack, Memphis; First Vice-President, J. A. Dale, Nashville; Second Vice-President, Southall Dixon, Bolivar; Recording Secretary, A. Sidney Page, Columbia; Corresponding Secretary, A. R. Melendy, Knoxville; Treasurer, J. D. Towner, Pulaski. Executive

Committee: A. R. Melendy, Knoxville, for East Tennessee; J. T. Meadors, Columbia, for Middle Tennessee; J. W. Peete, Memphis, for West Tennessee.

Monteagle was chosen as the next place of meeting, and the first Tuesday in July, 1901, was the date selected.

Colorado State Dental Association.

At the annual meeting of the Colorado State Dental Association, held at Boulder, Colo., June 12th, 13th and 14th, 1900, the following officers were elected for the ensuing year: President, E. R. Warner, Denver; Vice-President, J. Allen Smith, Colorado Springs; Secretary, H. F. Hoffman, Denver; Treasurer, William Smedley, Denver.

New York State Dental Society.

At the annual meeting of the New York State Dental Society, held at Albany, May 9 and 10, 1900, the following resolution was introduced and unanimously passed:

Resolved, That the Dental Society of the State of New York endorses and approves of the Dental Protective Association and emphatically deprecates the formation of other societies or organizations for similar or divergent purposes.

Resolved, That we express anew our loyalty to Dr. J. N. Crouse and extend to him our hearty appreciation of, and confidence in, his work as Chairman of that Association.

Iowa State Dental Society.

At the annual meeting of the Iowa State Dental Society held in Dubuque, May 1, 2 and 3, the following officers were elected for the ensuing year:

T. H. Gormly, Mt. Vernon, President; E. D. Brower, Le Mars, Vice-President; I. C. Brownlie, Ames, Secretary; W. R. Clark, Clear Lake, Treasurer.

Place of next meeting, Clear Lake, May, 1901. Date to be announced.

Texas State Dental Association.

At the twentieth annual session of the Texas State Dental Association, held at Dallas, May 15, 16, 17, the following officers were elected:

Dr. O. B. Love, San Angelo, President; Dr. H. L. Pearson, McKinney, First Vice-President; Dr. J. M. Nash, Brenham, Second Vice-President; Dr. J. G. Fife, Dallas, Secretary and Treasurer; Dr. A. F. Sontag, Waco, Curator of Museum. Executive Committee: Dr. L. P. Robertson, Marlin, Chairman; Dr. Sam G. Duff, Greenville; Dr. Bush Jones, Dallas.

The next annual meeting will occur at Sherman, the third Tuesday in May, 1901.

West Virginia State Board of Dental Examiners.

A meeting of the West Virginia State Board of Dental Examiners will be held at Martinsburg, August 1, 2 and 3, 1900, for the examination of candidates.

The examination will be in writing, and will cover all branches taught in the representative schools, together with operations in the mouth.

Candidates are requested to bring instruments, rubber dam and gold.

JAMES R. STATHERS, Secretary.

Sisterville, W. Va.

Connecticut State Dental Association.

At the annual meeting of the Connecticut State Dental Association, held in Hartford, May 15 and 16, the following officers were elected for the ensuing year:

President, A. C. Fones, Bridgeport; Vice-President, Henry McManus, Hartford; Secretary, Edward Eberle, 68 Pratt street, Hartford; Treasurer, Edwin B. Griffith, Bridgeport.

Executive Committee: F. T. Murlless, Jr., Windsor Locks, Chairman; Geo. O. McLean, Hartford; E. B. Abbey, Hartford; C. C. Prentiss, of Hartford, was appointed Assistant Secretary.

Among those upon the programme for papers were, Prof. M. C. Cryer, of Philadelphia; Dr. D. H. Allis, of Springfield, Mass., and Dr. C. Frank Bliven, of Worcester, Mass. Dr. Bliven was elected an honorary member of the association.

Eighteen new active members were added to the rolls.

The next annual meeting be held in Hartford, May 21 and 22, 1901. and from preparations already being made, it bids fair far to excel any meeting ever held by this association.

National Association of Dental Examiners.

At the seventeenth annual session of the National Association of Dental Examiners, held at Old Point Comfort, Va., July 13 and 14, the following officers were elected for the ensuing year: President, V. J. Turner, Raleigh, N. C.; Vice-President, J. F. Dowsley, Boston, Mass.; Secretary and Treasurer, Charles A. Meeker, Newark, N. J.

Committee on Colleges: C. C. Chittenden, Madison, Wis.; J. A. Hall, Collinsville, Ala.; M. F. Finley, District of Columbia.

Dr. Dowsley and Dr. Meeker were appointed to represent the Association at the Paris Congress.

The Missouri State Dental Association.

The Missouri State Dental Association, at its thirty-sixth annual meeting, elected the following officers and committees:

President, F. F. Fletcher, St. Louis; First Vice-President, W. M. Carter, Sedalia; Second Vice-President, F. H. Achelpohe, St. Charles; Corresponding Secretary, B. L. Thorpe, St. Louis; Recording Secretary, H. H. Sullivan, Kansas City; Treasurer, J. T. Fry, Moberly.

Committee on Ethics: A. M. Magee, Louisiana; J. T. Hull, Buller; G. H. Gibson, St. Louis.

Censors: J. R. Vaughn, St. Louis; J. W. Hull, Kansas City; J. F. McWilliams, Mexico.

Publication: Wm. Conrad, St. Louis; W. W. Birkhead, Louisiana.

Executive Committee: F. M. Fulkerson, Sedalia; W. M. Carter, Sedalia; J. F. Hull, Buller.

Committee on International Dental Congress during St. Louis World's Fair, 1903: Wm. Conrad, B. L. Thorpe, H. J. McKellops, F. F. Fletcher, A. H. Fuller, Walter M. Bartlett, and W. F. Lawrenz, all of St. Louis.

Next annual meeting to be held at Sedalia, first Tuesday after July 4, 1901.

Harvard Dental Alumni Association.

Alumni Day for the fourth consecutive year was held by this Association at the school building in Boston, June 25, 1900.

The work of the three classes for the year, with patients present, was exhibited, also clinics and demonstrations were given in the presence of one hundred and fifty-one individuals.

Papers were contributed by several professors and instructors of the school.

The observance of the twenty-ninth annual banquet took place during the evening at Young's Hotel, with one hundred and seven guests and members present.

Mr. Booker T. Washington, of Tuskegee, Alabama, and Roscoe Conkling Bruce, of Mississippi, were among the guests of the Association. Other speakers were Dean Eugene H. Smith, Prof. Thomas Fillebrown and Dr. L. D. Shepard, all of Boston. Mr. Charles W. Rodgers responded for the class of 1900.

The officers elected for the ensuing year are: President, Cecil P. Wilson, '72, Boston; Vice-President, Henry W. Gillett, '85, Newport, R. I.; Secretary, Waldo E. Boardman, '86, Boston; Treasurer, Harry S. Parsons, '92, Boston.

Executive Committee: Waldo E. Boardman, '86; William P. Cooke, '81; Patrick W. Moriarty, '89.

WALDO E. BOARDMAN, Secretary.

184 Boylston St., Boston, Mass.